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Editorial Notes.

WE need make no apology for the prominence of "Parliamentary Pharmacy" in the succeeding pages of this number. Chemists and druggists all over the country, and with almost one consent, have joined with their whole energy in the endeavour to defeat the partial and ill-considered measure which the Medical Department of the Privy Council would have imposed upon them. The opposition has been so general, so evidently sincere, so manly, and at the same time so respectful, that it has not failed to exercise considerable influence on the Government, and still more on many private members. We cordially join with the great majority of the trade in entreating the Vice-

President of the Privy Council to withdraw the bill. If he is not willing to admit that the education of chemists is the best and only effectual guarantee for public safety, he must perceive that it is unjust and unwise to establish a check upon one section of dispensers which is not applied to all. The chemists and druggists are far more directly interested in the prevention of accidental poisoning than it is possible for the Privy Council to be. But they view with natural and honest jealousy any attempt to interfere with their independence, especially when that interference is likely unfairly and injuriously to influence the opinion of the public.

Six hundred and fifty-two reprints of the foregoing paragraph are now in the post, addressed to the members of the House of Commons. In the event of a debate and division involving important results and demanding decisive action, we shall not fail to report matters to our subscribers with the utmost promptitude. But we shall not think it necessary to do so if the bill should be withdrawn or defeated. In order to aid in producing this result, we would suggest to all our readers who are not satisfied with its provisions to telegraph to one of their representatives at the House of Commons on Monday morning. The effectiveness of a widespread expression of opinion conveyed in this form will be considerable, and it will at the same time be an interesting exercise of literary ability for an ardent opponent to condense his arguments into the Post-office shilling's-worth.

A LETTER has appeared in the *Lancet*, signed by one *Dilemma*, which is worth reproduction here. The writer says:—

"I am a gentleman by birth and education. For a certain love to science I chose the medical profession. My experience of it was chiefly rural, where the patient and the doctor are brought legitimately together. My fate led me to purchase a practice in London, and, to my surprise, I find myself surrounded with all the appliances of trade—coloured bottles, scents, tooth brushes, small-tooth combs, treacle, etc. The very practice I entered upon was not without some of these adjuncts. I quickly expelled the coloured globes, and cut down the retail to a minimum. But what am I to do in competition on all hands with more showy establishments? Am I rightly informed that the medical men who are engaged in hospitals, dispensaries, etc., without any salaries, to attend the poorest in the land, are themselves obliged to live as respectable professional men, and eschew trade altogether? If so, does it not appear much more reasonable that we who have to attend the middle and upper classes for considerable payment should ourselves be compelled by some law of the colleges and schools to live as gentlemen, and, while we practise a liberal profession, to leave trade to those to whom it properly belongs? Some of my neighbours label their windows that they make up medicines ordered by other medical men. Is this professional?"

We are inclined to think that the writer of the above is quite as stupid as he describes himself, and further, that he is representative of a good many other poor creatures who eling wretchedly to the skirts of both medicine and pharmacy and have not the courage to walk boldly by the side of either. If they would trouble themselves less about their gentlemanly origin, and try to acquit themselves more like men, walking firmly on one side of the hedge only, they would win more respect for themselves, as well as for the profession which they adopt.

In a bill which has been introduced into the House of Commons, the Government have virtually adopted the suggestions made in the report of the special committee on Vaccination which we published in our last issue. Assuming the successful passage of the Act, no parent will in

future be liable to be convicted, if either (a) he has been previously adjudged to pay the full penalty of twenty shillings, or (b) he has been previously twice adjudged to pay any penalty. Nothing would be easier than to inveigh against such an apparently weak-handed method of enforcing the law, but we have little doubt that practically it will turn out to be the wisest course that could be adopted. The simple object is to starve out the martyrs. Another part of the bill makes it compulsory on every board of guardians to appoint a vaccination officer, who is to be informed by the district registrar, once a month at least, of the births in the locality. The working of the Act is to devolve mainly on the Poor-law Board, instead of on the Medical Department of the Privy Council as heretofore.

THE death of a hard-working French chemist, M. Anselmo Payen, at the age of 76, has recently been announced. He has quite lately served on a commission to report on disinfectants, and during his long life has devoted himself to many laborious chemical investigations. The potato disease, gun-cotton (which he studied so long ago as 1846, the year after its discovery by Schönbein), the composition of the eyes of Peruvian mummies, manures, and a variety of other subjects engaged his attention at different periods of his life. Among his researches may be mentioned his work on the Conversion of Starch into Dextrine and Grape-sugar, and his investigation of Diastase. He studied the physical and chemical properties of different vegetable tissues, also the chemistry of the nutrition of plants. He wrote on the distinctive characters of animal as contrasted with vegetable tissue, and experimented on the gastric juice. In early life he had the management of a factory, in which sugar was extracted from beetroot. Afterwards, having had the charge of another chemical works, he became Professor of Industrial Chemistry in the École des Arts et Métiers in Paris.

THE *Birmingham Daily Gazette* prints a letter received by Mr. Postgate, of Birmingham, from Mr. Muntz, M.P., in which the latter states that he was compelled to withdraw the Adulteration Bill because, being opposed, it had no chance of coming on in the House of Commons before July—of course too late to have any chance of passing this year. Mr. Muntz considers, however, that progress has been made, and that next session the Bill will have a fair chance.

THE office of Chancellor of the Exchequer is proverbially unpopular, but occasionally its administration may redeem it from harsh criticism or cynical grumbling. Despite the *fiasco* of the match tax and other unhappy experiences, Mr. Lowe is a great financier. That even his enemies will not deny. With the view of reconciling us to our burdens, or rather of pointing out the significant fact that as a people we are more able to pay off our debt now than formerly, his statistical tables bring out the broad result, that with an increased population we have fewer and lighter taxes, and more money to pay them, than we had nearly half a century ago. This retrospect of the past five-and-forty years is something astounding. For instance, in 1825 we were 22 millions of people; we are now nearly 32 millions. At the former period we owed £800,000,000, and paid £30,000,000 a year as interest on the debt; we now owe only £737,000,000, and we pay for interest only £26,826,000. Turning to our trade, the figures amply attest the growth of our national prosperity. In 1825 our imports were £37,000,000, and our exports £58,000,000, whereas they are now respectively £303,000,000 and £244,000,000. The produce of a penny in

the pound income tax was £867,000 in 1850; it is £1,500,000 at the present time. The house tax yielded £727,000 in 1852; it now yields £1,129,000. The 22 million people of 1825 drank barely 9,000,000 barrels of beer in the twelve months; our 32 millions now living drink all but 26,000,000 barrels. In fact, according to Mr. Lowe, every man, woman, and child in the kingdom consumes nearly a barrel of beer in the year. The consumption of spirits has increased also, though, we are happy to say, in nothing like the same proportion; but whereas 16,000,000 lb. of tobacco sufficed for us in 1825, as many as 41,000,000 lb. are wanted now. The contrast is as interesting as it is cheering, although you cannot help over-sensitive folks believing that it has been made preparatory to the levying of some new impost.

In New Granada grows a plant, the *Coriaria thymifolia*, known under the name of Ink Plant. The sap of this plant, called *Chanchi*, is adopted without any preparation for the purpose of writing. It shows at first on paper a reddish tint, but after a few hours becomes a deep black. Steel pens are much less affected by this sap than by ordinary ink. The virtue of the plant seems to have been discovered by the Spaniards. Some parchments written partly with the sap, and partly with ink, were sent to Europe, and during the voyage were soaked in sea water, from which treatment the parts written with common ink became illegible, but the parts written with the sap were not in the least injured.

A CORRESPONDENT of the *Chicago Druggists' Price Current* gives a form which he says is in use in that city for the manufacture of cheap carbonate of ammonia. It runs thus:—

| | | | |
|-------------------------------------|-----|----|--------|
| R Carbonate of Ammonia in powder | ... | 25 | parts. |
| Bicarbonate of Soda (cheapest kind) | ... | 75 | „ |
| Glue | ... | 1 | „ |
| Water | ... | 16 | „ |
| Aqua Ammonia | ... | 16 | „ |

Mix the carbonate of ammonia and the bicarbonate of soda well together. Dissolve the glue in the water, mix this glue solution with the aqua ammonia, and make a paste with the other ingredients. Bring it into suitable moulds, and let it dry sufficiently to suit your customers and your own purse.

THE report of the annual meeting of the Pharmaceutical Society which appeared in our last issue was described as the work of a London member. More accurately, it was a dovetailed combination of two reports, and this should have been explained in order to remove any individual responsibility of the views therein enunciated.

At the last meeting of the Pharmaceutical Council, the question of the admission of reporters was discussed. The result was that a resolution was passed to admit one for the *Pharmaceutical Journal*, but to refuse admission to the representatives of other journals; in other words to keep out the CHEMIST AND DRUGGIST. A Committee of Supervision was appointed to edit the reports, and expunge from them all dangerous or undignified remarks, and with power, we presume, to suppress an entire discussion, if this should seem desirable. Of course the exclusion of outside reporters is a corollary to the appointment of this committee, for no independent journal would admit reports of meetings tinkered together in this manner. Such a curious instance of the gingerly way in which respectable corporations descend to the platform of modern vulgarity, is at least interesting. Every one distinctly understands that this compromise is only meant to break the fall which must inevitably come. It requires a little dexterity to come downstairs gracefully.

In accordance with the recommendation of the annual meeting of proprietors, the managers of the London Institution, Finsbury-circus, have resolved to afford opportunities during the ensuing session for the reading and discussion of communications on subjects of special interest in science, literature, commerce, and the arts, provided they obtain such offers as will insure an adequate succession of suitable papers. It is believed that this proposed extension of the use of the Lecture Theatre will produce a series of attractive meetings similar in character to those of the Society of Arts, but representing more directly the business and thought of the City. The managers do not intend to restrict the reading and discussion of papers to the proprietors of the Institution.

Among our provincial reports this month, will be found some novel and interesting intelligence from Birmingham. The Midland Counties Chemists' Association down there has tried hard to keep up appearances, and to look as prosperous as its neighbours in the more northern towns. It has aimed to provide educational and commercial advantages for its members, but for some reason or another, the efforts of the Council do not seem to have been met so heartily by the chemists and druggists in the district as has been the case in other large towns. The second annual report, which we published in June, was a very unsatisfactory piece of literature indeed. Small attendance, complete failure of the educational arrangements which the Council had endeavoured to establish, and even the collapse of a proposed supper, seemed to indicate either the existence of a bad spirit, or the absence of a good one. But there was one hopeful point,—the treasurer announced a balance of 19*l*. 15*s*. 2*d*, and with this sum in hand, the Council with the proverbial energy of desperate men, have resolved to inaugurate a new session with a spirited and novel enterprise. They have taken central rooms in Birmingham, which they have resolved to convert into a trade club, and they propose to make this club useful in a variety of ways—scientific, commercial, educational, political, and social. Space is to be provided for the exhibition of trade novelties, a feature which ought to be warmly welcomed by wholesale houses, inventors, and manufacturers. Finally and above all, the association has almost ensured success by the prominent display of a real live grievance. The Midland Counties, taking Birmingham as their centre, cover an area of 10,000 square miles, and they have no representative in the Pharmaceutical Council. We have ourselves commented on this fact, which at the next election will demand serious attention. We shall be very glad to report substantial progress from the Midlands, and we may in conclusion urge on the wholesale firms who avail themselves of the opportunity for business now offered the simple justice of enrolling themselves as subscribers to the fund. Some of us have lived long enough to learn that 19*l*. 15*s*. 2*d*. is a sum which soon takes to itself wings and flies away.

"WHEN the hurly-burly's done, and the battle's lost and won," we venture to predict that the trade will retire from the contest, with at least a genuine respect for the manliness, honesty, and ability manifested by their chief opponent the Vice-President of the Privy Council. An incident which occurred, when the deputation waited upon him at the Privy-Council Office, was a sufficient indication of the clear common sense which has made Mr. Forster one of the foremost of living statesmen; and showed that he possessed so much of that invaluable quality as not to be affected by any legal quibbles which might be thrown in his path. We have

already reported the matter, but it is worth preserving in its original verduro. Representations had been made by more than one speaker, pointing out the fact that the Pharmaceutical Council represented only a section of the trade. The Society's solicitor deemed it his duty to correct this statement. "The Council *did* represent the trade, inasmuch as every chemist and druggist had a right to join the Society." Mr. Forster immediately asked the rather pertinent question, "But do they join it?" to which there could be only one response. Mr. Flux probably saw the irony. At any rate, everyone present saw the force of the rejoinder, that "certainly as a matter of fact the Pharmaceutical Council was not representative of the whole trade."

THE BRITISH PHARMACEUTICAL CONFERENCE.

THE eighth annual meeting of this prosperous association will occur at Edinburgh on the first and second days of next month. Mr. W. W. Stoddart, F.C.S., F.G.S., of Bristol, will again occupy the presidential chair, and will open the proceedings by an address, at 10 o'clock, on the morning of August the 1st. The reading and discussion of papers on pharmaceutical subjects will then commence, be continued in the afternoon till 4.30, and be carried on during Wednesday; an adjournment from 12.30 till 2.0 taking place each day.

As the time for this meeting is so near at hand, we may anticipate that many of our readers are preparing for the visit. We may again remind those not yet within the Conference that there is still plenty of room for new members, who should send their names, and a post-office order for 5*s*. 6*d*., to Professor Attfield, 17, Bloomsbury-square. The year commences with July 1st, and therefore all subscriptions are now due.

The varied attractions of the grand old city which have been chosen this year as the metropolis of science have been so often sketched and so warmly praised by travellers of all nationalities, that Scotchmen themselves can well afford to husband their enthusiasm. A few sentences in the circular sent to members will admirably serve to remind former visitors of the beauties of the spot, and will also whet the appetite of strangers who love the picturesque, and who delight in historical associations. The position of the city we are told is in itself striking and picturesque. The older part of the town (16th century) is built in a peculiar style on one side of a valley, forming a long and prominent ridge of buildings, many of which are of a most quaint character, and memorable as having been the residences of celebrated men. The more modern portion, called the "New Town," is built on the opposite side of the valley, forming in all its features a great contrast to "Old" Edinburgh. The objects of interest are numerous. Among others:—The Castle, containing the ancient Regalia of Scotland; from its ramparts a most extensive view is obtained. The old Chapel and Palace of Holyrood, rich in historical associations. The Calton Hill, crowned by the National Monument, Royal Observatory, and Nelson's Pillar; the prospect on a fine day from some points on this hill is unrivalled, and with the Firth of Forth and Ochil Mountains in the background, is not surpassed by any other locality in the world. Arthur's Seat (822 feet high), with its rocky and craggy sides, rearing aloft its lion-like head. The University, Museum of Science and Art, College of Physicians, College of Surgeons, Parliament House, Register House, and Royal Botanic Gardens. In the neighbourhood: Roslin Castle, Hawthornden, and the rare old Chapel well merit a visit. Abbotsford, the seat of the late Sir Walter Scott, can be reached by rail in an hour and a-half. The Queen's drive, surrounding Arthur's Seat, and Salisbury Craigs, Dalkeith Palace and grounds, new Battle Abbey, Dalhousie Castle, Hopetoun House, Dalmeny Park, and many other places of great interest and beauty, are within easy driving distance. Objects of interest to the geologist, botanist, and student of natural history, will be found in abundance. Daily excursions may be had by railway to some of the finest Highland scenery.

With only one other remark would we anticipate the

approaching meeting. The local committee at Edinburgh, have very gracefully walked out of a custom which threatened to hamper the real progress of the British Pharmaceutical Conference, and which has occasioned some little anxiety to its truest well-wishers. They have omitted from their programme the dinner, which almost looked like becoming inevitable, and which, however pleasant, was certainly not one of the objects held in view by the founders of the conference. Where so many friends meet together from various parts of the country, who are separated nearly all the year, social pleasure must result; but it is well to bear in mind that the Conference, as a conference, meets mainly for the encouragement of pharmaceutical investigation and the furtherance of pharmaceutical science. The members at Edinburgh have apparently taken such a view as we have indicated, but they manifest their hospitality by issuing cards of invitation to all the visitors to a conversazione, which is to take place in the Museum of Science and Art on the first evening of the meeting.

THE PHARMACY BILL (AMENDED).

SINCE our last regular publication, on the 15th of June, the chemists and druggists of Great Britain have enjoyed one of the liveliest months of their history. They had deliberately and firmly declined to be dictated to in the conduct of their businesses by the Medical Officer of the Privy Council, and that gentleman, with characteristic promptitude, had "applied to Parliament for further powers." This was necessary; but in taking that step it is possible that Mr. Simon had somewhat under-estimated the energy of his opponents, or had reckoned on it with much the same cool contempt which he has always manifested for their arguments and wishes. It is extremely unpleasant to introduce anything like personalities into the discussion of a question of this character; but we have extended means of forming a judgment, and we have no hesitation in attributing the present difficulty as much to the personal dislike which Mr. Simon has inspired among those whom he would govern, as to any other cause.

The bill, probably drawn up by himself, and which was passed through the House of Lords with unusual rapidity, was a specimen of despotic legislation which was much like what we might have expected, but which we might be sure could never pass through the ordeal of a fair and open discussion in the British House of Commons. Its only chance was to get into the rack of those bills which make up the real work of each session, but which, being of very slight public interest, pass through their various stages almost unchallenged in the House, and scarcely reported out of it. This, however, was not the destined fortune of the Pharmacy Bill. Through the medium of this journal, and by the united and vigorous action of some of the most eminent pharmacists of the country, a determined opposition was promptly organized, the influence of which has been felt in the legislature, and acknowledged by the Government. Means were taken to acquaint every member of Parliament with the objections almost universally held against the proposed measure, and in very many instances warm sympathy was expressed. The Right Hon. W. E. Forster, the Vice-President of the Privy Council, who had charge of the bill in the House of Commons, received an important deputation, and from his speech, which we reported in our special issue of June the 24th, it was clear that even he was not quite satisfied with the bill as it stood. The second reading has been twice postponed, and now stands for next Monday. The bill has been reprinted, and includes some important concessions on the part of the Government, but it is still utterly objectionable to the immense majority of the trade.

The new bill, as will be seen by those who read it, names in a schedule the regulations as to the keeping and dis-

persing of poisons which chemists and druggists would be required to observe. These regulations are similar to those recently issued as "recommendations" by the Pharmaceutical Society, with this important difference, that the use of the poison bottle in dispensing would be no longer insisted upon. It provides that new regulations may be issued from time to time by the Council of the Pharmaceutical Society, which must be approved by the Privy Council; but the bill does not, as its immediate predecessor would have done, reserve to the latter body arbitrary and unchecked powers. Finally, and chiefly, the bill as now amended would compel the observance of these regulations, not only by all registered chemists and druggists, but also by all medical men who keep open shop for the retailing, dispensing, and compounding of poisons. The other additions to the bill, referring to the more strict maintenance of the accuracy of the Register, we need not allude to in this place.

In the concessions thus offered, we confess we see no signs of weakness on the part of the Government, as some have asserted, but rather an honourable desire to do justice. We certainly trace the effect of the representations which have been made in our own columns, and by other means, directly to the ministers of the Crown. Mr. Forster's remarks, in reply to the deputation, indicated on the one hand a firm conviction of a duty which in this matter the Privy Council owed to the public, and, on the other hand, fair promise that every consideration should be shown to the chemists and druggists themselves. To an extent this indication has been carried out, but only so partially, that it will arouse as much jealousy and bitterness as if no concessions had been made at all. The lowest stratum of the medical profession has been included, but an unworthy and unwarrantable respect has been shown to the large body of surgeons who dispense their own medicines, and this for no comprehensible reason except one, which must bring the Government into contempt. Their arrangements for dispensing are notoriously more defective than are those of the chemists and druggists. Their *employés* are, in many instances, palpably incompetent, and their errors, though quite enough of them are reported, are more easily cloaked than are the accidents arising from a chemist's shop. As long as any section of dispensers is exempt from regulations affecting the rest, the latter will be in a sense *branded* as incompetent and untrustworthy; and yet Mr. Forster must know that the special training and education of the chemist and druggist renders him the one on whom the public might most safely rely in the matter of dispensing. He has stated this, in fact. The education and competence of the chemist and druggist he does not deny. But he thinks this is a question apart from education and competence. An accident may occur in any establishment, no matter how well educated and careful the proprietor may be. Such, in effect, was Mr. Forster's main argument to the deputation which waited upon him. In what manner does that argument apply to the chemist and druggist, and the shopkeeping doctor, and not in at least an equal degree to every man who in any manner whatever keeps and dispenses poisons?

There is a small section of the trade urging the acceptance of the measure as it now stands. Their views are ably advocated by Mr. Sandford, in a letter which we publish in this issue. There are large numbers who will oppose compulsory regulations to the end. They say, "it will by no means serve us if we succeed in fixing on our medical brethren a burden which in the present position of pharmaceutical education it is in no degree necessary to inflict upon either of us." They oppose compulsory regulations on principle, and they oppose them *in toto*. We are

hardly prepared to go to this length. The question must be looked at from a public, as well as from a trade point of view; and there can be no dispute about the importance of some precautions with regard to poisons. If it can be proved that everyone does adopt sufficient precautions, then the matter is settled; there is no necessity for regulations. But in any case we will most warmly and earnestly protest against any legislative enactment, which shall not include within its scope every dispenser of medicine, whatever may be his position or qualification.

PARLIAMENTARY REPORT.

ON Monday, June 26th, the Pharmacy Bill, which was set down for second reading, was postponed, on the motion of the Right Honourable W. E. FORSTER, until July 6th. On July 3rd, in answer to a question from Mr. T. CAVE, whether the attention of the Government had been drawn to the numerous petitions that have been presented against the Pharmacy Bill, and whether it was intended to proceed with the bill during the present session,—

Mr. W. E. FORSTER said the Government intended to proceed with the bill during the present session, its object being mainly to ensure that the first clause of the Pharmacy Act, passed in 1868—which said there should be regulations for the keeping, dispensing, and selling of poisons—should be complied with. He was aware that several petitions had been presented against the bill from chemists and druggists throughout the country, but he hoped to be allowed to take the second reading on Thursday, with a view afterwards to go into Committee, *pro forma*, and reprint the bill with amendments, which, he believed, would meet the wishes of many persons connected with the trade.

On July 6th, in reply to Mr. TORRENS, Mr. FORSTER explained that some amendments had been made in the Pharmacy Bill which would necessitate its reprinting, but he hoped the House would pass the second reading that night.

Later in the evening, when the bill was called, Mr. FORSTER formally moved the second reading, whereupon the following discussion took place:—

Mr. McCULLAGH TORRENS: As I understand, it will be convenient that the Government should obtain the assent of the House for reading this bill a second time to-night. (No, no.) If honourable gentlemen will favour me with their attention, I think I can satisfactorily explain why it is for the interest of those for whom they, as well as myself, are interested in this matter, that the course that I am about to propose should be taken. I understand—in fact, I have reason to know—that the Government intend to bring forward a number of new clauses which may or may not in the estimation of the trade seriously affect their position. I think it is only fair that the country should know what these clauses are before we are called to discuss them. (Hear, hear.) I have not the faculty which some honourable members seem to think they have, of being able to discuss clauses before they know what they really are. Having charge of this matter on behalf of a very numerous body of the trade, I am authorized by them to state that they prefer seeing the proposed new clauses before we come to discuss the bill. (Hear, hear.) If the right honourable gentleman who has charge of the bill will consent that no discussion shall take place on the merits of the bill until it is proposed to go into committee on the measure, I should think, for the benefit of those I so unworthily though sincerely represent, that we should not be called on to discuss it at this hour (quarter past one o'clock), which must be left uncompleted, however regularly conducted. The Government having changed their mind on some very important details of the measure, it was but fair that we should know the nature of this altered bill, and that time should be given (say ten days) for further consideration of the amended bill by those interested in the country, before we are called on to pronounce an opinion upon it.

Mr. B. COCHRANE: I quite concur in what has fallen from the honourable gentleman the member for Finsbury. I

know there is a large body of persons in the country who are deeply interested in this bill.

Mr. W. E. FORSTER: I have no intention of asking the House to enter on a discussion of the bill, or to go to a division this evening, but I should be very glad if the House would assent to the course recommended by the honourable gentleman the member for Finsbury (no, no); and for this reason, a great deal of interest is felt in the bill by gentlemen in the country, who are principally concerned in the progress of the measure. I believe my honourable and learned friend is only speaking the truth when he says that a large number of those gentlemen will be glad to know how the Government propose to meet their objections. If I am allowed to take the second reading I should not consider the House pledged in any way to the merits of the bill, but that is the only way I can put before them the amended bill, and I propose to go into committee, *pro forma*, tomorrow or the next day, for the purpose of printing the amendments (no, no, withdraw). There is no other way by which the views of the Government can be placed before the House, or the members of the trade be informed of the manner in which the Government propose to deal with it (withdraw). I undertake not to discuss the measure until Monday week, and I really will pledge the Government, in the strongest way possible, to allow an opportunity for discussing the bill.

Sir H. J. SELWIN-IBBETSON: I hope the House will not agree to what has been just proposed (hear, hear), and I will state my reasons for it. I am quite aware that the country is very anxious to see any amendments the Government propose to make in the Bill, but I confess I look with some alarm on a practice that is growing up in this House of assenting to the second reading of bills and affirming principles without discussion (hear, hear). Supposing the Government to be anxious to amend the bill, and that the country should have the earliest opportunity of knowing what they propose, it was in their power to place the amendments on the paper (hear, hear). They would then become public property, and be circulated throughout the country the same way as if the bill were committed *pro forma*, and as then corrected, to be sent out. By such a course the House would not be pledged to the principle of a bill we have not discussed. I hope the House will mark its sense of objection to what I think is a principle too lightly adopted (hear, hear).

Mr. W. E. FORSTER: Allow me for one moment. My sole object is to get the alterations of the Government brought before the House and the country as soon as possible. Although it is a very unusual course to take to place amendments on the paper before a bill is read a second time, yet, as it appears to be the wish of the House that it should be done, I will do so (hear, hear).

Dr. DALRYMPLE: I am sorry to find that there appears to be so strong an opposition to the bill. The principle involved in the bill being read a second time is as clear as possible, viz., that there is a right to put certain restrictions on the sale of poisons. That these restrictions have not been tested is the fault of the parties themselves; but nothing could be more unfair or unjust than that this bill should pass as it now stands, and but for the fact that it was to be amended, and fully and fairly put before the House and discussed, I should oppose the measure.

Mr. BERESFORD HOPE: I rise to second the statement of the hon. baronet the member for West Essex. I am glad the House has made this protest against reading bills a second time in the manner now proposed.

Mr. W. E. FORSTER: I will take the second reading on Monday week.

A large number of petitions from every part of the country were presented on various evenings.

The following is the Pharmacy Bill as it now stands. We have taken care to indicate the alterations which the amendments proposed by Mr. Forster would effect.

A BILL INTITLED AN ACT TO AMEND THE PHARMACY ACT.

Whereas under the Pharmacy Act, 1868, persons selling or keeping open shop for retailing, dispensing, or compounding poisons are required to conform to such regulations as to the keeping, dispensing, and selling of poisons as may from time to time be prescribed by the Pharmaceutical Society, with the consent of the Privy Council:

And whereas the Pharmaceutical Society have failed to submit for the consent of the Privy Council any regulations for the above purposes, and it is expedient to make further provision for the making of such regulations:

Be it enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same as follows;

1. This Act shall be construed as one with the Pharmacy Act, 1868 (in this Act referred to as the principal Act), and with the Act of the Session of the thirty-second and thirty-third years of the reign of her present Majesty, chapter one hundred and seventeen, intituled, "An Act to Amend the Pharmacy Act, 1868," and those Acts and this Act may be cited together as the Pharmacy Acts, 1868 to 1871, and each of the above-mentioned Acts and this Act may be cited as the Pharmacy Act of the year in which it was passed.

2. The recited powers of the Pharmaceutical Society of Great Britain under the principal Act shall cease. After the first day of October, 1871, the regulations as to the keeping, dispensing and selling of poisons within the meaning of the principal Act, which are set out in the schedule to this Act, shall be observed by all persons who keep open shop for the retailing, dispensing or compounding of poisons, and shall have the same effect as regulations prescribed in manner specified in the principal Act, and the provisions of the principal Act relating to such regulations shall be construed accordingly.

Every person who keeps open shop for the retailing, dispensing or compounding of poisons, and fails to conform with any of the said regulations shall, notwithstanding anything contained in Section 16 of the principal Act, or in Section 1 of the Pharmacy Act, 1869, be liable to a penalty not exceeding in the case of the first offence five pounds, and in the case of a second or any subsequent offence ten pounds, which penalties may be recovered on summary conviction as penalties under the principal Act may be recovered.

The Council of the Pharmaceutical Society may from time to time, by resolution approved by the Privy Council, revoke, alter and add to the regulations contained in the schedule to this Act, or made in pursuance of this section, and make new regulations in their place; and such resolution so approved shall, on coming into operation, have effect as if it were contained in the schedule to this Act.

Every resolution so approved shall be published in such manner as the Privy Council may direct, and shall come into operation at the date of such publication, or such later date as may be specified in the resolution.

Sections 10 and 11 of the principal Act are hereby repealed, and in lieu thereof be it enacted as follows:—

It shall be the duty of the Registrar to make and keep a correct register in accordance with the provisions of the principal Act, of all persons who are entitled to be registered under that Act, and to erase the names of all registered persons who have died or ceased to carry on business, and from time to time to make the necessary alterations in the addresses of the persons registered under the principal Act.

Every registered person shall send by post, by a prepaid letter, to the Registrar, notice of his ceasing to carry on business, and of any change in his address.

To enable the Registrar duly to fulfil the duties imposed upon him, it shall be lawful for him to send by post a prepaid letter to any registered person, addressed to him at his registered address, and enclosing a form to the effect that the person signing the same carries on business at the address therein specified; and requiring such person to return the form duly filled up and signed, to the Registrar within ten days from the date of the letter, and stating that in default further proceedings will be taken under this section.

If the letter so sent is returned to the Registrar through the dead letter branch of the Post-office, the Registrar may erase from the register the name of the person to whom the same was addressed.

If the letter is not so returned to the Registrar, but no answer is received thereto by the Registrar within three weeks after the date of the same being sent, the Registrar may send by post a prepaid registered letter, addressed as aforesaid, to the like effect as the former letter, but requiring the person to whom it is addressed to send with the form a fee of sixpence, and stating that if he fail to return such form duly filled up and signed, and such fee, his name will be erased from the register.

If the Registrar does not receive the form duly filled up and signed, and such fee, within fourteen days after the last-mentioned letter is sent, the Registrar may erase the name of the person to whom the same was sent from the register.

Any name erased in pursuance of this section may be restored by direction of the Council of the Pharmaceutical Society upon the payment of a fee of ten shillings, but the Council may remit the fee if it appear to them that the person whose name has been erased has, by reason of not having received the registered letter or otherwise, been innocent of any default under this section.

Section 14 of the principal Act (which relates to the punishing of persons procuring registration by false representations) shall extend to any person who wilfully makes any false statement in any form sent to the Registrar in pursuance of this section, or in any other communication, verbal or written, to the Registrar relative to or to the same effect as such form, and every such person shall be liable to be punished accordingly.

The term "address" of a person in this section means the place at which he carries on business.

SCHEDULE.

Regulations for the Keeping, Dispensing, and Selling of Poisons within the meaning of 31 & 32 Vict. c. 121, to be observed by persons keeping open shop.

(1) In the keeping of poisons each bottle, vessel, box or package containing a poison shall be labelled with the name of the article, and also with some distinctive mark indicating that it contains poison.

(2.) In the keeping of poisons each poison shall be kept on one or other of the following systems, namely:—

(a) In a bottle or vessel tied over, capped, locked or otherwise secured, in a manner different from that in which bottles or vessels containing ordinary articles are secured in the same warehouse, shop or dispensary; or

(b) In a bottle or vessel rendered distinguishable by touch from the bottles or vessels in which ordinary articles are kept in the same warehouse, shop or dispensary; or

(c) In a bottle, vessel, box or package kept in a room or cupboard set apart for dangerous articles.

(3.) In the dispensing or selling of poisons, every bottle or vessel containing an embrocation, lotion or liniment, in the composition of which any poison forms a part, shall have affixed thereto (in addition to the name of the article, and to any particular instructions for its use) a label giving notice that the contents of the bottle or vessel are not to be taken internally. In this schedule poison means a poison within the meaning of the "Pharmacy Act, 1868."

We read with much pleasure that Mr. William A. Tilden, the Demonstrator at the Laboratory of the Pharmaceutical Society, has taken the very honourable degree of D.Sc. at the University of London. Mr. Tilden is the only gentleman on whom that degree has been conferred this year.

* The marginal matter is the completion of the bill as it came from the House of Lords. We have printed it by the side of the amended bill for the convenience of readers.

CONTINENTAL CHEMISTS.

RUSSIA.

ALTHOUGH a good deal has been written on the different conditions of pharmacy on the Continent, very little is known about the way it is conducted in Russia. To a great extent, the system of conducting pharmacy in Russia is like that of North Germany, the chemists in general being of German origin, or from the German-speaking provinces.

The confidence the public has in a chemist may be attributed to the perfection and strictness with which his establishment is conducted, and therefore, some interest may be felt in a detailed description of the method of controlling prescription prices in Russia. There does not in Russia exist that discontented feeling amongst the public in general against the chemist overcharging prescriptions, or dispensing them with inferior drugs. In fact, it is astonishing with what exactness in so vast an empire the uniformity of prices is maintained.

The new Russian Pharmacopœia having been in use for some time, it was found necessary by the Medical Council (sanctioned by the Minister of the Interior) to give out a new price list for the use of chemists in Russia and Poland.

The new Russian "Taxa," which is a book of some sixty pages, contains:—

- A. Laws and Regulations.
- B. Price list of Drugs, Chemicals, and Compound Preparations.
- C. Taxation of Bottles, Pots, Boxes, etc., used in dispensing and selling.
- D. Taxation of Pharmaceutical Manipulations (Taxa Laborum.)
- E. List of Foreign Patent Medicines, sanctioned by the Medical Council for importation into Russia.
- F. Highest Doses of Strongly-acting Drugs for an Adult, adapted by the Russian Pharmacopœia.

A. Laws and Regulations.

1. The price list contains only those articles which are in the Pharmacopœia, and on pricing them their quality and merit has been kept in view.

2. If in a prescription by a medical man is not specified the quality of drugs or simple medicines, the chemist* is bound to dispense the preparation of the best quality, and in a pure state. Only on dispensing medicines for animals is it allowed to use a second or cheaper quality, should it not be particularly requested to be the best quality.

3. In pricing the medicines those weights are used which are generally prescribed by medical men.†

4. The ounce is taken as a unit, and for the sake of gaining time and material in weighing, the price for any quantity below an ounce is as follows:—

a. For pricing one drachm, the price of the ounce is divided into six.

b. For pricing one grain, the price of the drachm is divided into forty.

5. If any medical preparation is ordered in a larger quantity, the price of which is marked in the price list in ounces, then to lower the price, for each pound is taken only as much as will equal ten ounces, i.e., the pound is divided into ten ounces.

6. The lowest price for one grain is half a copeck,‡ and should no special price be fixed in the list for the grain, the half-copeck is to be charged. If the price for more than one grain will equal the price of the whole drachm, then the price of so many grains up to sixty should never exceed the price of

the whole drachm, i.e., if one drachm cost three copecks, one grain will cost half a copeck; five grains, two and a-half copecks, and six grains or more, up to sixty, no more than three copecks. The same applies to the price of drachms, i.e., if one ounce cost six copecks and the drachm 1 copeck, so should seven drachms and over up to one ounce not exceed the price of six copecks, and one ounce, seven drachms or over up to two ounces not exceed twelve copecks.

7. Drops or minims are reckoned equal to grains; therefore, all that has been said in reference to grains applies to drops.

8. On dispensing easily soluble salts and other like medicines (acid. citric, potass. nit., manna electa, etc.), if they are ordered in solutions, no price is to be charged for powdering or dissolving them.

9. On dispensing prescriptions, the chemist has no right to charge more than in the price list. To sell drugs over the counter cheaper than the price list is allowed when the medicines are of the best quality and used in proper quantity in compound preparations. Advertising of lower prices is prohibited.

10. If on pricing a prescription, a fraction of one-half copeck should happen, such fraction is to be reckoned for a whole copeck in favour of the chemist.

11. Drugs, which it is prohibited to sell without a doctor's prescription, are marked in the price list thus†. The selling of such drugs is allowed to chemists, photographers, artists, manufacturers, and tradesmen, but only by the laws laid down for selling and retailing poisons. All other drugs and chemicals not marked thus† are sold to the public in general.

12. Prescriptions dispensed the second time and all future times are to be charged the same price as at first, as well as those prescriptions dispensed and charged by the old tax.

13. Should a drug or a chemical preparation be ordered in a prescription, the price of which is not to be found in the price list, the price is to be charged in accordance with some other drug or preparation, the price of which may be found in a wholesale price list, and also in the "Taxa." If the prescribed drug is not even to be found in some of the wholesale price lists, so is it to be charged as near as possible to some other drug whose composition is alike.

14. The rate of charging for the labour, or the compensation of the chemist for his expenses in dispensing and selling prescriptions is explained under the heading "Taxa Laborum."

15. In order that the poorer classes should obtain the benefit of the simple and compound preparations mostly in use, and which do not require any manipulations, the chemist must dispense them without charging for wrappers, capping, cork, seal, label, or copy* of the prescription on the back of the label. All these remedies are written in the price list in large types.

16. Foreign patent medicines, the import of which is allowed by the Medical Council, are marked in another part, and can be sold by adding 50 per cent. to the actual wholesale price.

17. For greater convenience, a table of the highest doses for adults of all strongly-acting drugs contained in the Pharmacopœia is given. Should a doctor desire to order a still higher dose, he is compelled to make a sign thus (!), and to write the dose in letters.

* The labels (Signaturen) in use are long ones, such as were once common in England, thus:

| Name and Address of Chemist. | |
|--------------------------------------|----------|
| Mr. N. N., | |
| A tablespoonful 3 times a-day. | |
| 18 vj. 71, price 43. Doctor's name. | |
| ℞. Infus. Ipecac. ʒvj (e grana. vj.) | |
| Extr. Hyoscyami grs. vj. | |
| Syrupi simpl. ʒss. | |
| | M. D. S. |

which are attached to the neck of the bottle by twine; for internal use white ones, for external use yellow ones are employed. On the front of the label is the name and address of the chemist, name of the patient, how to be used, and the name of the doctor. On the back is written the copy of the prescription. The prescriptions are generally kept by the chemist who dispensed the medicine the first time, and therefore it is copied on the back of the label, which has to be brought again to the chemist, should the medicine be required to be repeated.

* Chemists are called apothecaries.

† Troy weight is used in Russia amongst medical men, 5,760 grains to the pound 1 pound = 12 ounces } Liquids as well as
1 ounce = 8 drachms } solids are weighed
1 drachm = 3 scruples } in dispensing pre-
1 scruple = 20 grains. } scriptions.

‡ Russian money in English value:—

| Money in English value:— | £ | s. | d. |
|---------------------------|---|----|---------|
| 6 Roubles, 28'640 copecks | = | 1 | 0 0 |
| 1 " 45'093 " | = | 0 | 5 0 |
| 1 " — " | = | 0 | 3 2, 18 |
| 0 " 29'018 " | = | 0 | 1 0 |
| 0 " 2'418 " | = | 0 | 0 1 |

One Rouble has 100 copecks.

One Rouble has 100 copecks.

B. Price List.

It would, of course, occupy too much space to give the whole price list here, and therefore, only a few articles have been selected, to give a general idea of its construction.

| Name of Drug. | Price in coopecks. | | |
|---|--------------------|----------|---------|
| | Ounces. | Drachms. | Grains. |
| Acetum | — | — | 17 |
| Aqua distillata simplex | 1 | — | — |
| Chloroformum | 42 | 7 | — |
| Decoctum quercu aluminati | 2½ | — | — |
| Extractum hyoscyami | — | 30 | 1 |
| Folia menthu piperitæ concisæ | 11 | 2 | — |
| Moschus ex vesicis | — | — | 22½ |
| Oleum ricini | 8 | 1½ | — |
| Pulv. acrophorus dosis una, five coopecks | — | — | — |
| Pulv. acrophorus seidlitz dosis una, ten coopecks | — | — | — |
| Radix ipeacuanha grosso modo pulverata | — | 14 | — |
| Radix ipeacuanha subtilissima pulverata | — | 20 | — |
| Radix rhei | 94 | 16 | — |
| Radix rhei concisa | 96 | 16 | — |
| Radix rhei subtilissima pulverata | 106 | 18 | — |
| Spir. vini alcoholisatus 95 per cent. | 12 | 2 | — |
| " " dilutus 30 per cent. | 4½ | 1 | — |
| " " rectificatus 90 per cent. | 10 | 2 | — |
| " " rectificatus 70 per cent. | 7 | 1½ | — |
| Tinct. opii simplex | 30 | 5 | — |
| " valerianæ | 14 | 2½ | — |

Each drug or compound preparation is priced in ounces, drachms, and grains, or when large quantities are used, as in decoctions, gargles, etc., in pounds. But what percentage of profits is added to the actual wholesale price, it is rather difficult to say; some $\frac{50}{100}$ th and more per cent. may be reckoned as actual profit on raw drugs, depending, of course, on the fluctuation of the market. It was a great grievance to the chemists, that previous to the present "Taxa," the old one was some ten or more years old, and though that time the wholesale prices rose, they were still compelled not to charge more than by the "Taxa." No matter how profitable the prices may be, it would be to the greater advantage of the chemists and the public in general, if the Medical Council should revise the prices oftener than hitherto.

Out of some 360 medicaments, 176 are not allowed to be sold without a doctor's prescription (these are marked thus†), showing the great care taken to prevent poisoning, or the misuse of drugs by ignorant people.

As seen in the price list, radix ipeacuanha is priced in coarse powder as well as in fine powder; the first to be used in infusions or cattle medicines, the other only if ordered by itself in powder, or in mixing with other fine powders.

The Excise prevents the retailing of spirit of wine by chemists.

C. Taxation of Bottles, Pots, and Boxes.

| Name. | Contents in Fluid Measure of Distilled Water. | Price in Coopecks. | | |
|--------------------------------------|---|--------------------|--------------------------|--------------|
| | | White Glass. | Blue, Black, and Orange. | Green Glass. |
| Dispensing bottles of all qualities. | From 3ss. to 1 oz. | 4½ | 5½ | 3 |
| | Over 1 oz. to 4 oz. | 5½ | 7 | 4 |
| | " 4 oz. to 8 oz. | 6½ | 9 | 5 |
| | " 8 oz. to 1 lb. | 8 | 11½ | 6 |
| | " 1 lb. to 2 lb. | 15 | 20 | 11½ |
| POTS. | | | | |
| Contents by Fluid Measure | from 3ss. to 1 oz. 3 coopecks. | | | |
| " " | over 1 oz. to 4 oz. 4 " | | | |
| " " | " 4 oz. to 8 oz. 5 " | | | |
| " " | " 8 oz. to 1 lb. 7 " | | | |
| " " | " 1 lb. to 2 lb. 13 " | | | |
| PAPER BOXES. | | | | |
| Name. | Contents to hold of Powdered Sugar. | Copecks | | |
| Paper boxes for dispensing powders. | From 3ss. to 1 oz. | 5 | | |
| | " 1 oz. to 4 oz. | 7 | | |
| | " 4 oz. to 8 oz. | 10 | | |
| | " 8 oz. to 1 lb. | 15 | | |
| Paper Boxes to hold Spread Plasters. | Length to 4 inches. | 6 | | |
| | " " 6 " | 8 | | |
| | " " 8 " | 12 | | |

It is left to the option of the chemist to use white or green glass vessels in dispensing, but on no account can he charge for white glass and dispense the medicine in green glass vessels.

Blue, orange, and black glass vessels are to be used for medicines which are affected by light, e.g., for nitrate of silver, chlorine water, iodine preparations, and others.

Also is it left to the option of the chemist to use expensive or cheaper kind of boxes, but he is not to charge extra. Some chemists use very nice and expensive boxes and cappings for medicine bottles: in fact, this luxury is often carried to excess, one chemist trying to out-do another.

D. Taza Laborum.

| | Copecks. |
|--|----------|
| 1. Preparing any medicines for internal or external use, with the exception of mixed herbs— | |
| Up to 6 ounces | 10 |
| From 6 ounces to 8 ounces | 14 |
| " 8 " to 1 pound | 20 |
| Over 1 pound, for each pound | 4 |
| Note. If the composition of the medicine is an infusion, decoction, emulsion, or a "saturation," it is reckoned separately, thus:— | |
| For each ounce of infusion or decoction up to 4 ounces | 1½ |
| Over 4 ounces, for each ounce | 1 |
| " 1 pound, for each pound | 6 |
| Emulsions from oils, balsams, or for saturation of liquids, no matter in what proportions they are prescribed | 5 |
| 2. Mixing herbs, whether cut or in coarse powder, up to 6 ounces | 8 |
| Over 6 ounces up to 1 pound, for each ounce | 1 |
| " 1 pound, for each pound | 4 |
| 3. Dividing powders into doses, inclusive of the paper capsule, up to 12, for each | 1½ |
| Over 12 powders, for each | 1 |
| Should it be necessary to use waxed papers, then for each powder up to 12 | 2 |
| Over 12 powders, for each | 1½ |
| 4. Dividing herbs into separate packets, for each packet, inclusive of the paper | 2 |
| 5. Dividing a pill mass into pills (formatio pilularum), from half a grain to five grains inclusively, for each drachm | 8 |
| Over 2 drachms, for each drachm | 4 |
| Note. (a) Pills weighing over 5 grains are priced as boluses. See below, 10. (b) For covering the pills with powder, the price of the powder ordered is charged, reckoning 1 scruple for each drachm of the pill mass. | |
| 6. Silvering pills, for each drachm | 10 |
| 7. For gilding pills, for each drachm | 30 |
| 8. Covering pills with sugar, collodion, or with solution of bals. toluatan., for each drachm | 10 |
| Over two drachms, for each drachm | 6 |
| 9. Covering pills with gelatine, for each drachm | 15 |
| Over two drachms, for each drachm | 10 |
| 10. For dividing boluses and trochisci (formatio bolarum, rotularum et trochiscorum,) for each drachm | 3 |
| Over an ounce, for each drachm | 2 |
| 11. Dividing suppositoria, for each | 6 |
| 12. For spreading plasters on calico up to half an ounce, including the calico | 6 |
| 13. For spreading plasters on leather up to two drachms, including the leather | 6 |
| Over two drachms, for each drachm | 4 |
| 14. Cutting or coarsely powdering all medicaments not mentioned in the price list of the drug, for each drachm up to six | 1 |
| For each ounce | 1½ |
| " pound | 15 |
| Note. On prescribing medicaments which should not be cut or coarsely powdered, but which are already priced in a cut or powdered state, the price has to be lowered thus:— | |
| For one drachm | 4 |
| " ounce | 1½ |

15. For finely powdering all drugs, the powdering of which is not noted in the price list, for each ounce 6
For each drachm 1
Note. Powdered medicaments ordered for domestic animals are dispensed and priced in coarse powder, even if ordered pulvis subtilissimus, with the exception of those already in a powdered state, as arsenicum album, stibium sulphuratum nigrum, and others.
16. For wrapping powders, herbs, plasters, etc., including seal, label, and copy of prescription .. 8
17. For labels and seals of boxes, including the copy of prescription 6
18. For capping bottles—cork, labels, seal, and copy of prescription 7
19. No price is charged for capping, tying, cork, seal, or label, in retailing drugs, as well as those written in the price list in large letters and used for the poor, if these should be ordered singly, and not require any pharmaceutical operation.
20. As for the cure of cattle, large quantities are usually ordered, they are to be sold 20 per cent. cheaper than the price list.

E. List of Foreign Patent Medicines.

The foreign patent medicine mania being restricted in Russia by the Medical Council, only some hundred are in the price list, out of which some fifty can be retailed again in general or fancy shops (and are marked thus *); the rest are strictly confined to chemists.

F. Highest Doses of Strongly-acting Drugs for an Adult.

| Name of Drugs. | Highest dose. | |
|------------------------------------|---------------|---------|
| | Drops. | Grains. |
| Acidum arsenicosum | | 1/8 |
| " arsenicum | | 1/8 |
| " hydrocyanatum medicinale | | 1/8 |
| Oleum crotonis | 1 | 2 |
| Opium | 12 | 10 |
| Scalae cornutum pulveratum | | 10 |
| Zincum sulphuricum | | 10 |
| " " as emetic | | 10 |

Résumé.

Having thus far tried to lay before the readers the method by which uniformity of price is maintained amongst chemists in Russia, it will be useful to give a few examples of its working.

It may be, though, a tedious work occupying too much of the chemist's time to price each prescription; but it is astonishing what rapidity the head assistant (*provisor*), whose duty it is to price them, acquires in a short time.

Examples of three prescriptions priced in Russian money, and the totals converted into English value, will illustrate the system.

R Infus. ipecacuanha 3vj (e grana vj.)
Extr. hyoscyami grana vj.
Syrupi simplicis 3ss.

Take a tablespoonful three times a day.

M. D. S.

| | | |
|---|---------|---------|
| x grains rad. ipecac. grosso modo pulv. | = 3 | copeck. |
| aking six ounces infusion | = 8 | " |
| x grains extr. hyoscyami | = 6 | " |
| alf an ounce syrup | = 4 | " |
| ixing mixture over six ounces | = 14 | " |
| hite glass bottle over four-ounce measure | = 6 1/2 | " |
| rk, label, capping, etc. | = 7 | " |

Total 48 1/2 copecks.

Being 48 1/2 copeck (the half is charged for a whole copeck in favour of the chemist) = 49 copeck = 1s. 8d. English.

R Stibium sulph. aurantiacum gran. j.
Morphaia acetici gran. 1/2.
Pulv. ipecacuanha gran. 1/2.
Sacchari albi pulv. grana x.
M. f. pulv. dentur tales doses No. xij.
D. S. One powder every fourth hour.

| | | |
|---|------|---------|
| Twelve grains antim. sulph. rubr. | = 3 | copeck. |
| One grain morph. acetici | = 3 | " |
| Six grains pulv. ipecac. subtiliss. | = 3 | " |
| Two drachms pulv. saccharis albi | = 3 | " |
| Mixing the powders | = 10 | " |
| Dividing into twelve doses and capsules | = 18 | " |
| Box | = 5 | " |
| Label, seal, copy, etc. etc. | = 8 | " |

Total 53 copeck.
53 copeck = 1s. 10d. English.

R Folia menthae pip. concisa v
D. S. To be used as directed.

| | | |
|---|------|---------|
| Six ounces fol. menth. pip. concisa | = 66 | copeck. |
| Wrapping up the herb, including seal, label, etc. | = 8 | " |

Total 74 copeck.
74 copeck = 2s. 6 1/2d. English.

It will be seen from these three examples that it is more profitable to the chemist to dispense prescriptions which require pharmaceutical operations, because then he can charge for his own labour, whereas in the case of simple drugs he cannot do so.

The price is generally marked on the side of the prescription.

A few remarks on the sale of foreign patent medicines in Russia may be of interest. About eight years ago it was difficult, nay, almost impossible, to obtain genuine patent medicines in Russia, the import being restricted, and the transport expensive. It was then common for the chemists to put up the articles themselves (such as Henry's Magnesia, Oxley's Ginger, Albespeyres Papers, Dutch Drops, etc. etc.), and for that purpose labels and wrappers, in English, and stamps were kept in stock by the printers, the imitation in some instances succeeding so well, that it was difficult to distinguish the spurious from the genuine articles.

For the purpose of doing away with this trade, the chemists of Russia started a company amongst themselves for importing and retailing genuine foreign patent medicines at the lowest prices to the chemists of Russia only, guaranteeing genuineness by having their own stamp over each article.

NOTES "EN VACANCE."

TOULOUSE, May 20.

IN this curious old city, large and extensive, but with narrow and tortuous streets, the pharmaciens seem to make more preparations, both chemical and pharmaceutical, than in any other large city of France yet visited in this tour.

In most instances, the wholesale house only supplies the substances premières, there being but few elaborate preparations, as our liquors, concentrated decoctions, etc.; even extracts are very often made by the retail men; but in Toulouse, as yet undisturbed by approaching invasion, the manufacture even of chemicals such as morphine obtains with many of the pharmaciens.

Although anxious to buy at lowest rates, yet the French druggists are often suspicious of their wholesale houses, and very frequently test opium for the proper percentage of morphine, and Calisaya bark for that of quinine. They are also very particular about certain external signs: ipecacuanha must be as dark a brownish-grey as possible; the Codex directs it to be of a gris noirâtre, though there is a good deal of lighter root powdered in the provinces. There is a curious but sensible prejudice here in favour of very hard opium; certainly there is less

water in it, and therefore a given mass will contain a larger percentage of morphine. On the other hand, this hard opium (I am not here speaking of the inferior qualities that become hard by the admixture of chaff and other impurities), does not impart a good colour to the tincture. The extract; however, is the great preparation of opium in this country, and hence a dry, hard, but bally opium is preferred. Small cakes are inquired after by the wholesale dealer as being more saleable, and this is the reason that the Constantinople opium is often esteemed by them above the Smyrna. I have noticed lately that fine qualities of Tinnevely senna are beginning to find much favour in their eyes, principally from its appearance. For the first time, its use is permitted by the Codex of 1866; previously, the only official leaf was that of Alexandria, called *Séné d'Égypte dit Séné palte*. This, coming in by way of Marseilles, was generally cleaned and garbled, and sold as *Séné trois-quarts mondé*; the article produced was something between our senna Alex. sorts, and our "hand-picked"; this latter was found in commerce as *Séné mondé à la main*. But of late years, as Alexandrian senna has advanced in price, the large leaf and beautiful colour of the Tinnevely, has induced many to order and sell it exclusively; but the small or discoloured leaf, and that known in England as East Indian or Bombay, finds a sale amongst the lowest class of pharmaciens. With the Alexandrian senna, has gone out to a great degree the senna-pod or fruit, termed here *Follicule de Séné*. This pod, as well as the white flower found in Alexandrian senna, is occasionally collected and sent into France in large bales, consisting exclusively of the fruit. Its use continues, however, in some parts of France, almost to the exclusion of the leaf, and we must remember that it was made use of before the leaf by the Arabs and indigenous inhabitants of the North of Africa. The properties of the two are as nearly as possible the same.

In looking through the pharmacies in the South of France, far away from Paris, the inferiority of the French inventive faculty, when applied to things useful and not ornamental, must strike the close observer. Of the elegance of their finest surgical instruments, and the taste displayed in the *articles de vertu* that adorn some of their more modern pharmacies, we cannot speak in too high terms: but in the ordinary sundries sold always by the English druggist, and not unfrequently by the French pharmacien, the difference is striking, and the inferiority of the productions of this country palpable. The same thing with surgical appliances. Over and over again I have been told in ambulances in the country, that now and then articles were sent from Paris of the most perfect make, but that the common run was poor, and generally showing a deterioration after wear. Take such a simple object as a feeding-bottle. In all the French makes the prevailing idea seems to be excessive elaboration. Now this, a virtue in *articles de Paris*, is a vice in feeders, where simplicity is the *summum bonum*. The article produced by the French houses is both expensive and elaborate; two undoubted defects: and hence the extensive sale of several English makes on the Continent. With some articles cheapness is the sole object that is here looked for. Such are, male injection syringes— $\frac{1}{2}$ oz.—sold to the trade at 6d. to 10d. per dozen; such also are, catheters, bougies, suspensory bandages, as sold at strangely low prices; but with many other things as scent-bottles, mortars, measures, lozenges, and the thousand articles that fill the English druggist's glass-case, they are in this country dear, not simple, and above all *unpractical*. And the faculty of invention seems here at fault. In a land of smokers, the *Cachou aromatique* was never thought of; among a people who universally wear tight boots, the corn plaster is a thing almost unknown; in the nation *par excellence* favourable to chemistry, perfumery and *la cuisine*, English glycerine, German eau-de-Cologne, and Liebig's extract of meat have forced an entry, and continue to maintain their superiority. To admire the inventive faculties of the French mind you must leave the pharmacy (after noticing some crystals, as quinine valerianae, admiring the solid extracts of Berjot, and remembering that Beral first thought of the scaly preparations, and Pelletiers was the earliest maker of quinine), and passing thence, bestow your enthusiasm on the wonderful productions of Paris,—the jewellery, simple yet massive; the *bonbonnerie*, delicate and artistic; the perfumery always finding customers at exorbitant prices; the marvellous

trifles made out of unions of metal, wood, leather, etc., and known by the generic name of *articles de Paris*. And more especially that skill in designing, and that marvellous faculty which prompts the taste displayed in the arrangement of form and colour which makes French textile fabrics as regards *patterns*, the first in the world. When this taste is elaborated and elevated into art, few European nations can contest the first place with the one in whose ranks art enrols as representative men,—R. Bonheur, Viollet-le-Duc, and Gerome.

Tours, May 30.

What a dull city this has now become; and what a difference to its aspect in the days of Gambetta's dictatorship, and, later on, during the Prussian occupation? And yet it is a beautiful place, this ancient archiepiscopal city of Gregory of Tours. The Loire—wide and placid—reaches as far as the eye can see on either side; the twin towers of the cathedral stand aloft, a landmark in every direction; avenues of trees, beautiful in this soft spring warmth, stretch away from the centre of the town in long but scarcely monotonous boulevards. In the days when Boulogne was a haven of refuge to the spendthrift, and the Rue de la Paix, in Paris, the centre of a colony of our country people, Tours became the resort of a large number of English. As is their wont, they gradually create a little England around them, and especially is this noticeable in their domestic medicines. The head of the family may bring himself to read the morning news from the *Journal des Debats*, but he will not take *Pilules Dehaut*, he must have his Cockle's or Norton's pills; mamma will encourage French masters, or even send her children as day-scholars to the neighbouring convent, but she must have James's and Dover's powders, and the powder of the famous Dr. Gregory. Her daughters have no faith in *Perles d'Ether* for headaches, or *Pâte de Regnaud* for a cough: they never even take that favourite of the Frenchwoman—the *Limonade de Rogé*. The baby must have an English feeding-bottle; her children, "Sweet Spirits of Nitre;" her husband must from time to time refresh himself with "Pil. Hydrarg." and "Ext. Coloc. Co.;" she herself finds nothing so refreshing after the hot Touraine sun as a cup of tea from England, with a spoonful of Sal Volatile. And hence it happens that where English congregate, there soon establishes himself a *soi-disant* English chemist and druggist. He is generally an intelligent *pharmacien*, who acquires sufficient of our language to make out London prescriptions; he invests in a very antique Pharmacopœia, gets a few patent medicines, and a series of labels in the same tongue; hangs up two glass plates, inscribed *Magnesia* and *Arrowroot*, with a glass jar labelled *Turkey Rhubarb*, and then writes up with great confidence, "English Chemist"—"Drugs from Apothecaries' Hall." This is his stock-in-trade; he is now established, and *faute de mieux* our country people flock to his pharmacy. And in times gone by, it unfortunately happened frequently that it was by no means the best *pharmacien* of the town who thus attracted the British exile; this still strikes me as being the case in towns and cities that are falling behind this rapid age—as, for example, Tours. But travel through Europe; visit men, and cities where they now assemble, and with *Syanarelle*, we shall exclaim, "*Nous avons changé tout cela!*" I do not speak of such cities as Paris and Brussels, where the houses of Hogg, Swann, Gallois, Swift, Roberts, Beral (I name them in the order in which the traveller passes them), and the Pharmacie Delaere at Brussels, enjoy a European reputation, and where everything equals what is met with *chez Savory or Bell* at home. I speak more especially of watering places. My memory calls up the pharmacy of M. Gras, at Cannes; M. Destouet, at Pau; MM. Mourou Frères, at Biarritz: these have English managers, who of necessity ensure proper organization and requisite stock. In the main street of Tours exists a specimen of the old-fashioned *Pharmacie Anglaise*. Both himself and his *pharmacie* seem to belong to a former generation. This latter idea brings me to the white-headed *pharmacien* near the *Tours Charlemagne*, one of the two who dispute as to which is the discoverer of *Perles d'Ether*. He has a machine by which this most ingenious form of capsule is turned out with prodigious rapidity; ethers and ethereal preparations are the best adapted to the *perle*, which is produced by two coats of paste, joining at the edges, and

enclosing the liquid. This elegant little globule, so fitly named *Pearl*, is gradually obtaining a great demand in France and most non-English countries. Wonderful old man is this M. Moreau: though nearly eighty, he is hard at work in his *officine* at six o'clock every morning; and his mind is still ingenious. He invented a short time ago a pill machine in the form of a fan, but double in construction, each of the two faces being rayed on the inner side; the pills, in rolls, are thus divided by these cutting rays.

One of the wholesale houses here is very prettily situated at the back of a garden, or rather the yard between the outer walls and the warehouse has been turned into a flower garden. The day I visited this man—courteous, agreeable, but terribly *entêté* on the subject of France's glory and grandeur—the weather was very hot (and in summer Tours must be a furnace), this garden, suddenly entered from the dusty street, was deliciously cool and agreeable: it was like a draught into an icy claret cup after a baking pull up to Kingston-on-Thames. The counting-house was in one corner of this flowery courtyard, the warehouse on the right, the chief entrance in the centre; it was decidedly no place to stimulate to that tearing, hard work to which we are accustomed in England. And this gives the key-note to much of French work: the hours are long, but the work is dawdled over. Reference is continually being made to what they call the great English proverb, "Times is money," but no improvement takes place in their business habits. Note, by the way, that the first word is always spelt with a final "s." This is a peculiarity of French writers, and shows to what extent the English language has here reached. As a rule, the French do not know the value of time, or perhaps, to put it more correctly, they do not perceive the value of it to others. I admit that it is quite fair to lose time yourself; scarcely so fair, however, to cause others to lose it as well. I have seen many French cities, and I have been thrown into contact with Frenchmen of every grade, in business and otherwise, and I have constantly found that, with a few brilliant exceptions, their two stock ideas to you are, "Attendez," "Revenez"—always the same absence of *dispatch* in business. If you have any money transactions at a banker's or wish to obtain a *visa* to a passport, you have to wait an interminable time—a merchant will ask you to call three or four times before he transacts what could be done in ten minutes' serious application; a *pharmacien* will generally keep you waiting twice as long as is really necessary. But Government officials are the worst; and official men of science attain, if possible, to a waste of time even greater. Too often, unfortunately, had I occasion to sigh after English habits of getting rid of work on hand in the shortest time. Several times, engaged on scientific inquiries, I thought that *le jeu ne valait pas la chandelle*; was it necessary to waste so much time over affairs of science or of business? To my mind the *mot* of the village *curé* has much sense. He confessed to his flock that the value of his sermon was not equal to the attractions of the powers of evil (*ne valait pas le diable*), but he advised them to listen to him in a spirit of penance. A similar idea was frequently my only consolation during long hours of tedious waste of words; for prosy talk is the bad coin of valuable deeds—one is never prodigal of both at the same time.

ORLEANS, June 5.

An uninteresting town that can be best described by negatives—not beautiful, not animated, not pleasant. It has suffered very much by the late war. Twice occupied by the Prussians, and once by the French army, at a time when discipline was at a low ebb, the inhabitants were pillaged by the one, and had to afford support to the other. The poor people seem to have felt this; they had lost all spirit, no *va et vient*, no life in the whole of Orleans, and the grass is seen growing up in the streets. In the evening, at eight o'clock, you notice here and there a light flitting about, and here and there a dark shadow; it is as desolate as Versailles used to be in the good old time; simply quiet enough for the peaceful domestic hearth: perhaps Paris life is contrary to Nature, but most certainly people accustomed to it must be eaten up with *ennui* in a place like this. As is my wont, I made friends with one of the principal *pharmaciens*. . . But I think that Orleans is the first city (for it is a bishopric, the seat of the learned Dupanloup) in which I did not find

a single new pharmaceutical idea; the Germans had not left one behind them. However, we went on talking, and in course of conversation the point came up that was a matter of dispute a few years ago—whether the preparations of the Pharmacopœia should have the name of *official* or *officinal*. Mr. Squire used the former; the latter is employed in the "Elements of Pharmacy." In France they appear to have both, but in another form. They divide the preparations into two grand classes:—1st, Magistral preparations; 2nd, Official preparations.

The second class comprises those of which the composition is given in the Codex, and which are generally found ready prepared in the pharmacy or *officine*; hence the name. Indeed, there are a number of preparations (marked with an asterisk in the table of the Codex) which it is obligatory for the *pharmacien* to keep on his shelves. As in many other cases, however, this is observed rather as a direction than as a command.

F. H. L.

PRESCRIPTIONS FOR PROVINCIAL ASSOCIATIONS.

BY JOSEPH INCE.

IT is a strange thing that the word *gift* in English means a present, and in German, *poison*; a fact which is exemplified in the following Berlin permit:—



An

fann

abgelassen werden. Es ist zwar zulässig, daß die dergleichen Substanzen durch Beauftragte abgeholt werden, dieselben müssen jedoch erwachsen (über 14 Jahre alt) und nicht in einem augenscheinlich unzurechnungsfähigen Zustande sein, auch haftet der Auftraggeber für jeden in Folge der Vertretung entstandenen Schaden oder Unglücksfall.

Berlin, den

Der Vorstand des ten Polizei-Reviers.

Form: No. 231.

Translation of the original:—

POISON.

To—[Five silver groschen's worth of rat poison may be delivered to August William Michalls, master butcher.]

There will be no objection to the above-named substance being taken away by any one commissioned (by A. W. M.), provided that such person be an adult (over 14 years of age), and not obviously unaccountable for his actions: and moreover, the person issuing the commission, will be responsible for any harm or misfortune resulting from such trust.

Berlin, [May 16th, 1870.]

The Superintendent of the

4TH POLICE DISTRICT.

Another specimen of the literature of prescriptions is as follows: "Ploas a coff mixer with little antmonty whine, the baby his 6 mounts old." The schoolmaster seems to have been very much abroad, and was probably waiting for the Bristol scheme of education.

During the past month several collections have been received, unfortunately without a note stating the donor's

name. I have to acknowledge with many thanks, both the kindness of these unknown contributors, and of

I.

Mr. R. W. Harley, 11, Upper Baggot-street, Dublin. This series includes a recipe by Sir Dominic Corrigan.

II.

Mr. D. Mills, of Sydney, N.S.W., per George Harvie, Helensburgh.

The Book of Prescriptions for Hull is in a very forward state, and will be speedily completed.

PRIVATE PROPERTY IN WORDS.

A GENTLEMAN in a large provincial town has submitted to us some correspondence which raises a point of no small importance to chemists and druggists who are not also connected with the Pharmaceutical Society. We take up the matter simply with the hope that we and all concerned may arrive at a definite and clear understanding of our rights and those of our neighbours with regard to the use of certain English words derived from the Greek language.

Our correspondent describes his establishment as the "Edge-lane Pharmacy," which assumption, having come to the knowledge of the Registrar, called forth a letter dated June 28th, 1871, in which this was asserted to contravene the twelfth section of the "Pharmacy Act, 1852," and to render the proprietor liable to a penalty of £5. The authority quoted for this statement runs thus: "From and after the passing of this Act it shall not be lawful for any person, not being duly registered as a pharmaceutical chemist, to assume or use or exhibit any name, title, or sign, implying that he is registered under this Act." To this Mr. Bremridge adds, in the letter to which we are referring, "As the use of the word 'Pharmacy' clearly implies this registration, I must request you to remove it at once to prevent the trouble of legal proceedings being instituted." Mr. Goldsmith (the chemist thus threatened), in reply to this, made certain representations to the Registrar, questioning whether the offence was so evident as Mr. Bremridge had intimated. The answer received, dated July 7th, 1871, indicated that the few days' reflection had either shaken the secretary's confidence in his own reading of the Act, or had evoked the latent spirit of mercy which everyone believes lodges somewhere behind that gentleman's waistcoat. The letter commenced "Dear Sir" (the former letter began "Sir"),—"I shall submit the question as to whether persons simply registered as chemists and druggists are at liberty to call their businesses 'Pharmacies' to our Parliamentary Committee at the earliest opportunity. In the meantime all proceedings in the matter will be deferred."

When a few gentlemen in 1841 combined to establish the Pharmaceutical Society they seized on a word which was particularly appropriate, but to which they could certainly claim no right as inventors. The words "pharmaceutical," "pharmacy," and others, derived from the same root, *φάρμακον*, a drug, were then, and had been for centuries, a part of the English language, and were then, and are now, as free to everybody as the Queen's highway. This, we presume, will be admitted, and would command the assent even of the Parliamentary Committee of the Pharmaceutical Society. Those gentlemen would hardly claim entire control over all the nouns and adjectives which have been introduced into our language from the root, *φάρμακον*. Nor can they legally, we imagine, prohibit any further development of our language in the same direction. It is true that the word "pharmacy" as it is used in

the instance which has occasioned these comments is employed in a different sense to that which has been attached to it in former times. Then it meant the science of drugs, here it is used to designate the place where drugs are stored and sold. But both derivations are perfectly legitimate, and all our readers are perfectly aware that the employment of the word "pharmacy" has been openly advocated by more than one eminent pharmacist to replace the word "shop" when used in connection with a drug business, as being more effective, more professional, and at the same time more accurate. We may or may not take this view of the matter, but Mr. Goldsmith had a perfect right to do so, and certainly from our individual point of view we could never have supposed that in giving effect to his ideas, or his fancies, whichever they may be called, by thus publicly describing his shop he was trespassing against any prescriptive rights of the Pharmaceutical Society. It is almost inconceivable that the exhibition of the word could lead anyone to suppose that it indicated connection with any society. If the words "Edge-lane Pharmacy" implied anything, it was that it was a pharmacy established under the auspices of the Edge-lane Board of Health, or whatever may be the governing body of that locality. Such a body might possibly have a shadow of ground for complaint, but why the secretary of the Pharmaceutical Society should feel hurt about it is outside of our comprehension. If the Parliamentary Committee should resolve that the use of the word is an infringement of their rights, one would hardly like to recommend Mr. Goldsmith to resist them even to the law court; but certainly there are many of us who would like to see a common-sense decision, which would prevent the Society from extending its prerogative beyond reasonable limits.

Homœopathy.

THE DISPENSING DEPARTMENT.

A SUGGESTIVE paper on "Dispensing Arrangements and Requirements in Homœopathic Pharmacy," was read before the Homœopathic Pharmaceutical Society, on May 16th, by Mr. C. J. Peal. By the courtesy of the author we are able to present an abstract of the lecture, which, to an extent, will be found worth the perusal of others as well as those engaged exclusively in homœopathic dispensing.

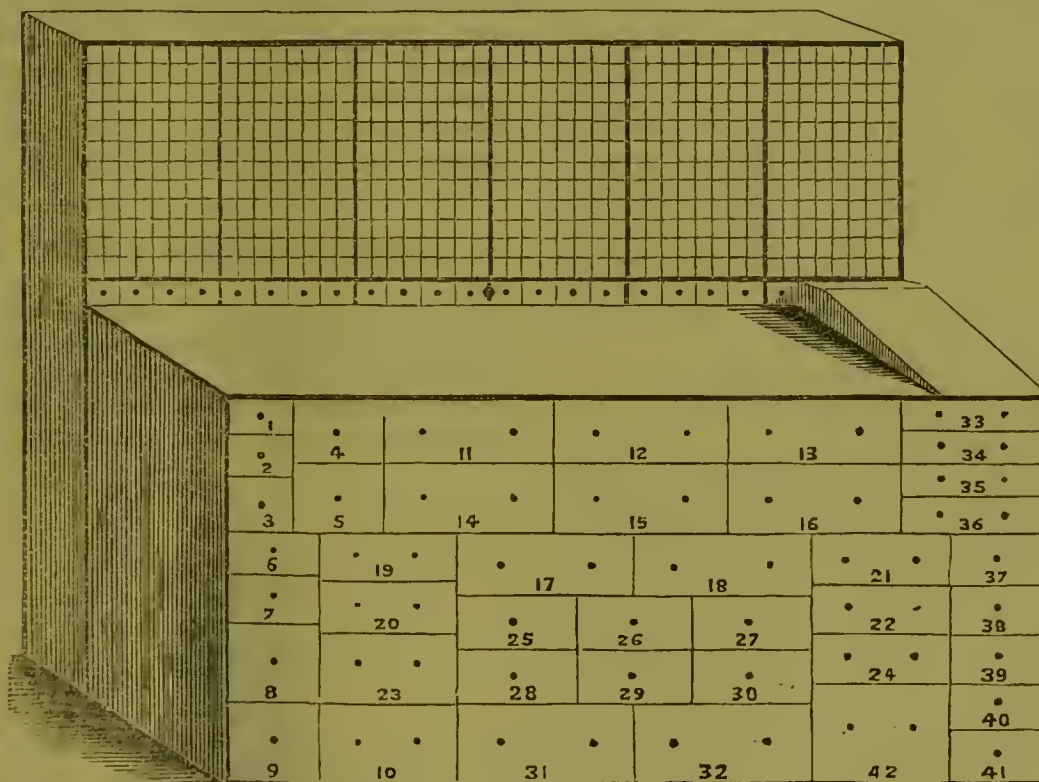
The first requirement to ensure good and careful dispensing is a convenient arrangement of the various articles required, and this, I have in many instances noticed, has been lost sight of; but it is a subject which ought to be carefully considered when fitting a shop, as, if everything required is at hand, much time is saved, and those finishing strokes so important in dispensing are ensured which would probably otherwise be neglected.

Dispensing in a homœopathic pharmacy is so different to that in an allopathic one, that arrangements admirably adapted for the latter are almost useless in the former. Knowing this, I have endeavoured to design a counter which shall contain, if possible, all the preparations and articles constantly required in homœopathic dispensing.

The sketch of a dispensing counter before you represents a counter eight feet long, three feet deep from the dispensing board, with a front five feet two inches high from the floor, or two feet two inches from the level of the dispensing board, and two feet in width from front to back. I will attempt to describe the arrangement I would suggest, and will commence with the screen board. This is marked off into six divisions; these are for the six decimal potencies of triturations, namely, 1x, 1, 3x, 2, 5x, and 3; each division is again subdivided into 96 partitions, to take 96 3iv wide-mouthed (Steer's opodeldoe) bottles; and as only 80 medicines in the Pharmacopœia are ordered to be prepared in trituration, there is room left for sixteen additional medicines, if such are added at any time. These

bottles would hold each twenty drachms of trituration, and each potency should be arranged in eight rows of twelve, and in alphabetical order of the medicines, the bottom of the bottle being about one inch lower than the top, the corks (and of course the bottles) being distinctly labelled so as to be read with ease by the dispenser. I think $\frac{1}{4}$ -in. wooden divisions are much preferable to stages drilled with circular holes. Below the triturations is a row of small drawers intended for dispensing labels, and the sealing jet is in the middle; this completes the body of the screen, the height of which is two feet two inches. On the top of the screen board, measuring eight feet by five inches, a sufficient supply of glass funnels and measures, and larger glass mortars, external tinctures, distilled water and spirit, might stand. The dispensing board of counter is nineteen inches wide, five inches being taken off for screen, and it is best kept quite free from any fixtures, except a small desk (one foot wide, and extending from front to back) at the right hand for copying prescriptions and writing directions. If the counter is at all exposed, it would be advisable to guard it at each end with a ground glass screen: of course, movable articles, such as scales, press-seal, &c., will of necessity find their place on the counter.

Below the dispensing board the counter is divided into drawers, which I have numbered from 1 to 42, and of which I will describe the uses in consecutive order: these drawers all measure nineteen inches from front to back.



No. 1 (6 inches wide and 4 deep) is for tube corks and corked tubes, various sizes, each size being separated by divisions.

No. 2 (same size) is for corks assorted from 1 dr. to 1 oz.

No. 3 (6 inches wide and 5 deep) for corks assorted from 2 to 20 oz.

No. 4 (10 × 6½ deep) for 1-dr., 1½-dr., 2-dr. and ½-oz. bottles and cases.

No. 5 (same size) to hold 1-oz., 2-oz., and 3-oz. bottles and 1-oz. cases.

No. 6 (11 × 4 deep) for 1-dr., 1½-dr., 2-dr., ½-oz. and 1-oz. stoppered bottles.

No. 7 (11 × 4 deep), for 2-oz., 3-oz., and 4-oz. stoppered bottles.

No. 8 (11 × 7 deep), for 4-oz., 6-oz., and 8-oz. bottles.

No. 9 (11 × 7 deep), for 10-oz. and 12-oz. bottles.

No. 10 (16 × 7 deep), for 16-oz. and 20-oz. bottles.

Nos. 11 to 18 (21 × 6½ deep), are to be fitted with stages, drilled each for 224 $\frac{3}{4}$ long series bottles, in 14 rows of 16. No. 11 for matrix tinctures; No. 12 for 1x; No. 13 for 1; No. 14 for 3x; No. 15 for 2; No. 16 for 5x; No. 17 for 3; and No. 18 for 4th and 5th attenuation together. The

Pharmacopœia names 152 medicines in tincture or solution of matrix strength; 191 in 1x; 196 in 1st centesimal; 199 each in 3x, 2, 5x, and 3; and only 59 medicines insoluble to the 4th attenuation, so that as each drawer is drilled for 224 bottles, there is provision made for at least 23 new medicines in Nos. 11 to 17; and in No. 18, there being 59 bottles, each of 4th and 5th attenuation, there is provision for 6 new medicines of this class; this arrangement provides for every medicine obtainable, in every or any attenuation up to the 3rd centesimal, being at hand; also for the 4th and 5th tinctures or solutions of medicines not soluble at a lower potency. In order to greatly facilitate attenuating, I would suggest that each of the $\frac{3}{4}$ bottles be marked, by means of a diamond, in two places, namely at the height of one fluid drachm, and also of ten fluid drachms. This can easily be accomplished by using fine lead shot for measuring during the marking, and once done with a diamond, it will never require renewing so long as the bottles last, and the saving of time and trouble afterwards, as well as securing correct proportions in attenuating, will amply repay the time occupied in doing this at first. Each bottle will have one-sixth of its space left for thorough agitation. In order to ensure the use of the correct vehicle in attenuating, it is very advisable that every bottle not prepared with rectified spirit should bear a label stating whether water or what strength of spirit is to be used; and if liable to decomposition, a label stating such to be the case.

Nos. 19 to 22 (16 × 5 deep) are to be fitted with stages drilled each for 120 $\frac{3}{4}$ medium wide-mouthed bottles, in 10 rows of 12. No. 19 for matrix triturated tinctures, No. 20 for 1x, No. 21 for 1st centesimal, No. 22 for 3x. These triturated tinctures, if carefully prepared, are not liable to injure by keeping, and greatly facilitate dispensing, insuring the quantity prescribed of any preparation being given, without any absorption by the powder paper, which is commonly the case when the Sacch. Lact. is put on the paper, and the medicine dropped thereon; apart from which, many of the lower attenuations being ordered in the Pharmacopœia to be prepared with diluted spirit, the Sacch. Lact. is more or less difficult to manipulate. If indicated when wanted either an unnecessary amount of Sacch. Lact. must be used, or a very indifferent powder, or rather mass, is sent out. Where triturated tinctures are not kept, all saturated powders ought to be well mixed in a glass mortar.

No. 23 (16 × 5 deep) is to be fitted with a stage drilled for 42 $\frac{3}{4}$ wide-mouthed bottles, in 6 rows of 7, to hold the most common pure chemicals from which the triturations and solutions are prepared.

No. 24 (16 × 4 deep) is to be fitted with a stage drilled

For 56 5ij wide-mouthed bottles, in 7 rows of 8, for the remainder of the pure chemicals mentioned in the Pharmacopœia.

Nos. 25 to 30 (14 × 11½ deep) are to be fitted with stages drilled each for 204 5ss long bottles, in 12 rows of 17, to take all the medicines (150) mentioned in parts I. and II. of the Appendix to the Pharmacopœia. These six drawers would hold a total of 1,224 bottles, which would allow for all the medicines being kept, if necessary, in the first six decimal attenuations, though in these uncommon medicines the centesimal attenuations would be as much as need be kept, as a rule; but if the decimal attenuations are kept, it would be well to mark those bottles used for tinctures also with a diamond, at the height of 20 minims and of 200 minims.

Nos. 31 and 32 (21 × 7 deep) are not intended for drawers, but to have fall-down doors, and the spaces to be used for ointment mortars and slab, infusion jars, etc.

No. 33 (16 × 3 deep) is for labels, with a division in front for an assortment of palette knives.

No. 34 to 36 (same size) are for wrapping paper, cut in all the necessary sizes, the drawers being divided to take each size.

No. 37 (10 × 5 deep) is for powder boxes, etc.

No. 38 (same size) for capping leather, post boxes, etc.

No. 39 (10 × 4 deep) for small glass mortars in divisions.

No. 40 (same size) for ointment pots.

No. 41 (same size).

No. 42 (16 × 8 deep).

In addition to the dispensing counter laid out as described, every well-conducted pharmacy ought to contain every medicine in the Pharmacopœia in every centesimal dilution up to the 30th, and the best arrangement I know for keeping these attenuations is to have a box for each, fitted with a stage drilled for 30 bottles, in 5 rows of 6, each box to be clearly and distinctly labelled outside, and kept arranged in alphabetical order. A very good kind of box, if made strong enough, is a millboard box with a shoulder, and the lid coming over the body of the box, by which means the dust is kept out, which cannot be avoided in drawers, unless they are exceedingly well made. The long 5ij bottle is the best size for this purpose, and a box to take 30 of these, in 5 rows of 6, would measure 5 × 6 × 3½ deep; and as the Pharmacopœia mentions 246 medicines, without the 150 in the Appendix, not less than two gross of boxes ought to be provided, and this number, if stacked in 16 rows of 18 on shelves, would occupy 9 feet by 7½ feet.

Pilules and globules I have not mentioned, and I think if medical men could be induced to eschew these preparations altogether in prescribing, it would be a mutual gain to the chemist, the patient, and medical men themselves; so far as my experience has gone, I have found them but little used by the profession, and I do not think it is necessary to make any particular arrangement of them for dispensing. Of course, the general demand for pilules and globules will necessitate their being kept ready at hand in the most convenient position practicable in each pharmacy.

The dispensing counter should be well lighted, and a moveable bracket from the top of screen board, with a reflector to throw the light on the counter, would be a good plan; and, though scarcely included in my subject of this evening, I think if all the pharmacies were lighted by the now much used sunlight burners, we should not expose our preparations to such extremes of temperature as we now do.

DETECTION OF IODINE AND BROMINE.—Hager describes a curious behaviour of these halogens to solvents. Bisulphide of carbon, agitated with bromine water, acquires a yellow colour, leaving the water colourless; if now iodine is added, it will be dissolved by the carbon bisulphide, while the bromine again dissolves in the water. This displacing of the bromine from its solution in bisulphide of carbon occurs the more readily if the water contains a salt in solution, and the bromine may, by careful agitation, be dissolved in ether. If solutions of bromide of potassium and ferric chloride are agitated with carbon bisulphide, no alteration takes place; but on the addition of an iodide, the bisulphide acquires the violet colour characteristic of free iodine, and ether agitated with the aqueous liquid dissolves bromine and becomes yellow. Minute proportions of iodine (less than 1-100th) cannot be detected by these methods.—*Pharm. Cent. Halle, 1871, 49, 50.*



BROOKS'S METAL STOPPER AND SPRINKLER.

THE new stopper introduced by Messrs. H. Brooks and Co. will, we anticipate, obtain great popularity among chemists. They are cheap, and, especially for perfumery articles, are both elegant and useful. The sectional drawing in the



margin shows the construction. A metal tube passes through a cork, and, as will be seen, the metal and the cork are irrevocably joined together by a series of notches. The top is metal, and is provided with a screw cap. The size of the tube varies from a mere pin-hole to half an inch, and the metal tops are manufactured of a silver and golden colour. In use, of course, it is only necessary to remove the cap, but it is apparent that the whole of the stopper is removable, and at once applicable to another bottle. We recommend these stoppers with the utmost confidence.

STOCKER'S CRYSTAL FEEDING BOTTLE.

THE same firm (Messrs. H. Brooks and Co.) also introduce some new feeding bottles, the patents of Mr. Stocker. The one entitled the "Crystal" is well worthy of note. The name is very appropriately applied, from the fact that, with the exception of the india-rubber and the little bone shield on



the teat, every atom of the bottle is of glass. The union of the tubes being of this material, the passage of the liquid is at once seen by the nurse—undoubtedly an advantage. Some considerable ingenuity is displayed in the stopper. The glass is notched into a surrounding piece of cork, in the same way as the stopper engraved above, and a perfect fit

is secured, as well as a certainty that the cork will not slip away. Above the bulb of the stopper is a small india-rubber ring, which covers a minute tube; this meeting, at right angles, a longer one which passes through the glass. The india-rubber ring is pierced, and thus a valve is formed, sufficient to ensure a current of air, but there is no chance of leakage. The bottles are sold at the usual rates.



THE TOBACCO CONTROVERSY.*

THIS is the thousand and first attempt to settle a question which has reason on both sides, but which has been argued out with perhaps as little regard to practical investigation as any of the ordinary subjects of young men's discussion classes. The controversy was cursed from its commencement with royal patronage, which naturally gave an unfair advantage to the opposite party. We have not the least doubt that several millions of King James's subjects went through all the preliminary tortures of tobacco-smoking in order to test the accuracy of his Majesty's "Counter-blaste." Certainly no importer of the present day could wish for a handsomer slice of fortune than that Queen Victoria should undertake to write a denunciation of any special article which he might be trying to introduce to the British public. But this is not the point. And the point which concerns us at this time is a very important one indeed. With two-thirds of the adult male population of this country, and with the male inhabitants almost to a baby of nearly every other civilized land, indulging in a practice which certainly, apart from idiosyncrasies, has either a deteriorating or a beneficial influence on the manhood of the world, it becomes a matter of some moment to get some scientific acquaintance with the actual results of the practice on our constitutions, even though perhaps we must be compelled to leave the moral consequences of the habit in the fog, or we should rather say in the cloud of smoke wherein partisans have enveloped it. Tobacco-smoking has some sort of effect on its slaves' mucous membranes, tissues, salivary glands, digestive organs, heart valves, lungs, livers, brains, and windpipes, which is either good or evil. Which is it? Surely it is a matter of sufficient general interest to justify us in asking the question. But it does not seem at any time to have been of sufficient individual interest to have induced any physiologist to devote his whole energies, abilities, and even his life to the elucidation of such scientific facts with regard to the action of tobacco as should establish a basis for a complete argument either for or against the use of the fascinating weed. It is a fact that amid the innumerable treatises which have been written on this subject by friends and foes, there is scarcely anything to be found except a constant repetition of stale guesses or violent statements of individual opinion. It would make a good subject for the employment of the superfluous energies of the Medical Department of her Majesty's Privy Council, which, when it gets into perfect working order, is expected officially to guarantee the final banishment of disease and death from all parts of the British Empire.

Dr. Murray's little book makes no pretension to original investigation on this subject. It is a gaily written *rechauffé* of the medical, scientific, and literary aspects of smoking, and as such, it affords an hour or two's interesting and profitable study for smokers, although the conclusions presented are by far the most satisfactory to non-smokers. In fact, it strikes us that the author has played a rather jesuitical trick on those most likely to be his readers. About a year ago Dr. Murray wrote a little work of similar appearance on snuff-taking, in which he highly exalted the virtues and glorious effects of that intelligent but partially obsolete custom. This we now recognise as only the first development of the doctor's plan. The reader expected an equally enthusiastic eulogy on the far more clogant and popular

habit of disposing of tobacco. Instead of a eulogy we have an apology, and scarcely that. The doctor is evidently a secret agent of the Anti-Tobacco Society, and we claim no small credit for having seen through his devices. Cleverly mixing up with his glowing descriptions of the comforting influence of a "long clay" or a well-flavoured cigar, subtle insinuations of the dangers resulting from them, the author manages to leave the impression that smoking cannot by any possibility do any good, and in ninety-nine cases out of every hundred is likely to do injury. No one should commence to smoke before forty, or thirty at the youngest. Not one man in fifty would smoke at all if he waited till that age before beginning. One pipe is enough at a time—two, three, or more, "must be injurious to most men." To drink beer, wine, or spirits, with the smoke is dangerous, for they dissolve the nicotine. In fact, the path of the smoker is so hedged about with precautions that if he should follow the guidance of Dr. Murray in this respect, his life would become a burden to him, and we doubt not he would ere long throw away his luxury altogether.

Dr. Murray is very angry with boys who must needs smoke, and he gives statistics which sufficiently prove, what we fully believe, that the practice of smoking indisposes and unfits the mind for intellectual exertion. This is a very serious matter indeed, the more so because the habit is so prevalent among students of every profession. The soothing influence of tobacco on the nervous system, at least of young persons, is a grotesque misrepresentation, as any smoker may prove if he will resolve to discontinue the practice for a week only. He will enjoy a feeling of vigour, and an elasticity of mental power which will amply compensate for the lost luxury. That smoking impairs the digestive powers, and, with some persons at least, affects the heart, is undoubted, and the only good thing that can be said about it medicinally is its possible action as a disinfectant. The universality of the habit proves something certainly; but we should hesitate to accept such universality as an absolute proof of excellence. It may only prove the old saying that "one fool makes many."

Corner for Students.

CONDUCTED BY RICHARD J. MOSS, F.C.S.*

The chemical formulæ employed in this section are based upon the new system of atomic weights, unless the use of the older system is specially indicated. In the *British Pharmacopæia* the symbols corresponding to those adopted here are printed in heavy Clarendon type. The new editions of Fownes's *Manual of Chemistry*, and Atfield's *Chemistry: General, Medical, and Pharmaceutical*, supply the data required for calculations, and are recommended as text-books.

QUESTIONS.

First Division.

Instead of the usual questions, we shall give for this month an exercise in Qualitative Analysis. Students who wish to compete are required to send in their names and addresses before the 20th inst. On the 24th, weighed quantities of the substance to be examined will be forwarded; and answers will, as usual, be received up to the 15th of the following month.

The substance to be analysed is a mixture of salts, but it is only to be examined for ammonium and the following metals—K, Na, Ba, Sr, Ca, Mg, Zn, Mn, Al, Cr, and Fe.

Answers are to consist of a concise account of the analytical operations by which the presence or absence of these substances is ascertained.

Second Division.

I. ACIDS.—How many grains of water are there in one fluid ounce each of the officinal nitric, sulphuric, and hydrochloric acids (strong)?

II. ANALYSIS.—By what chemical tests would you distinguish between the carbonates of sodium, lithium, calcium, and barium?

III. GAS ANALYSIS.—Five volumes of a compound gas are mixed with 17 volumes of oxygen, and exploded in an eudiometer. Ten volumes of the resulting mixture are absorbed by potassium hydrate, and on exploding the

* "Smoking: when Injurious, when Innocuous, when Beneficial." By JOHN C. MURRAY, M.D. London: Simpkin, Marshall, and Co.

residual gas with four volumes of hydrogen, no gaseous residue remains. What is the composition of the compound gas?

IV. GAS VOLUME.—What is the volume in litres, at 735 m.m. pressure, and 21 deg. C., of the nitrogen dioxide produced by the action of nitric acid on 20 grammes of copper? (One litre of nitrogen dioxide weighs 1.3434 grammes.)

V. SPECIFIC GRAVITY.—A glass ball weighs 15 grains in air, 3.5 in water, and 3.132 in milk. What is the weight of a gallon of the milk?

ANSWERS.

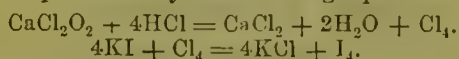
First Division.

I. ALKALOIDS.—Quinine is soluble in about 350 parts of cold, and 200 parts of boiling water. It dissolves readily in alcohol, both hot and cold, but it is less soluble in ether, requiring about 60 parts of this liquid for its solution. It dissolves in about two parts of chloroform.

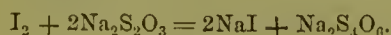
Morphia dissolves in about 1,000 parts of cold and 400 parts of boiling water; it requires 90 parts of cold, and 20 to 30 parts of boiling alcohol for its solution. The solubility of morphia in ether depends upon its physical condition; in the crystalline state it is almost insoluble in this liquid, but when recently precipitated it may be dissolved in a much smaller quantity of ether. The solubility of morphia in chloroform also varies considerably, from about 60 to 200 parts of this liquid being required for its solution.

Strychnine dissolves in about 7,000 times its weight of cold water, and is but little more soluble in warm water. It is almost insoluble in absolute alcohol and ether; in dilute alcohol it is sparingly soluble. Strychnine dissolves in about six parts of chloroform.

II. CALX CHLORATA, B.P.—Chlorinated lime is generally regarded as a mixture of calcium, chloride, and hypochlorite; when mixed with potassium iodide, dissolved in water, and acidulated with hydrochloric acid, a reddish solution is produced, owing to the liberation of iodine. This is due to the decomposition of the potassium iodide by the chlorine set free by the mutual decomposition of the hydrochloric acid and calcium hypochlorite. The probable nature of this reaction is represented by the following equations:—



On adding the sodium hyposulphite solution, the equivalent of iodine liberated by the chlorine is converted into sodium iodide, causing the discharge of colour. This reaction may be thus represented:—



As 1,000 grain measures of the sodium hyposulphite solution contain $\frac{1}{10}$ th of an equivalent in grains of this salt, they correspond with $\frac{1}{10}$ th of an equivalent of iodine, which requires for its liberation $\frac{1}{10}$ th of an equivalent, or 3.55 grains of chlorine. Ten grains of chlorinated lime should require 850 grain measures of this solution, showing the presence of 3.02 grains of available chlorine, since,

$$1,000 : 850 = 3.55 : 3.02.$$

This quantity is equal to $(3.02 + 10 =) 30.2$ per cent., which is the strength required by the Pharmacopœia.

III. GAS VOLUME.—The liberated hydrogen would require 4.778 litres of chlorine for its conversion into hydrochloric acid. The decomposition of sulphuric acid by zinc is thus represented:—



whence it follows that 13 grammes, or $\frac{1}{4}$ th of an equivalent in grammes of zinc, would liberate $\frac{1}{4}$ th of an equivalent of hydrogen, which would require for conversion into hydrochloric acid $\frac{1}{4}$ th of an equivalent, or 1.42 grammes of chlorine. As a litre of chlorine at the standard temperature and pressure weighs 3.1734 grammes, to find its weight at 743 m.m. pressure, and 12 deg. C., we have the proportion:—

$$\frac{760 : 743}{255 : 273} = 3.1734 : x \therefore x = 2.971.$$

Therefore, 1.42 grammes of chlorine would measure at the given temperature and pressure $\left(\frac{1.42}{2.971} =\right)$ 4.778 litres.

IV. GAS VOLUME.—The quantity of air required is 17832.528 cubic feet. In 1 cwt. of coal containing 86.37 per cent. of carbon, there are $\left(\frac{86.37 \times 112}{100} =\right)$ 96.734 pounds of this element, requiring $\left(\frac{96.734 \times 32}{12} =\right)$ 257.958

pounds of oxygen for its combustion. In a similar manner it may be ascertained that the 6.989 pounds of hydrogen contained in the cwt. of coal will require 55.910 pounds of oxygen. The total quantity of oxygen required is therefore 313.869 pounds. Now to find how many cubic feet of air containing 23 per cent. by weight of oxygen would contain 313.869 pounds of oxygen, if 100 cubic inches of air weigh 31 grains, we have the following compound proportion:—

$$\left. \begin{array}{l} 23 : 100 \\ 31 : 100 \\ 1728 : 1 \end{array} \right\} 313.869 : x \therefore x = 17832.528.$$

$$1 : 7000$$

V. VOLUMETRIC SOLUTION OF IODINE, B.P.—The solution contains 4.049 per cent. of sulphur dioxide. The volumetric solution of iodine contains $\frac{1}{10}$ th of an equivalent of iodine in grains in every 1,000 grain measures, which corresponds with $\frac{1}{10}$ th of an equivalent of sulphur dioxide, or 3.2 grains. Therefore 930 grain measures of the volumetric solution indicate the presence of $\left(\frac{3.2 \times 930}{1000} =\right)$ 2.976 grains of sulphur dioxide in 73.5 grains of the solution under examination. This proportion is equal to $\left(\frac{2.976 \times 100}{73.5} =\right)$ 4.049 per cent.

VI. SPECIFIC GRAVITY.—The specific gravity of the copper is $\left(\frac{1.12}{1.12 - .995} =\right)$ 8.96. As the diameter of the wire is 1.5 millimetres, or .15 centimetres, the area of a section of it would be $(.15^2 \times .7854 =)$.01767 square centimetres. The length of the wire is 2,000 centimetres, therefore $(.01767 \times 2000 =)$ 35.343 cubic centimetres is its solid measurement. A cubic centimetre of water weighs 1 gramme, but the copper is 8.96 times heavier than water; accordingly the wire weighs $(35.343 \times 8.96 =)$ 316.673 grammes, or .317 of a kilogramme.

Second Division.

I. NUX VOMICA, B.P.—Brucine may be distinguished from strychnine by its ready solubility in absolute as well as dilute alcohol; but the action of nitric acid upon these bodies affords the most reliable test for distinguishing them. Nitric acid dissolves pure strychnine, forming a colourless solution, which becomes slightly yellow when heated; it dissolves brucine, forming an intensely red solution, which when heated changes to yellow. If stannous chloride, or ammonium sulphide, be added to this solution, the colour becomes intensely violet.

II. VOLUMETRIC SOLUTION OF NITRATE OF SILVER, B.P.—The solution contains 1.583 per cent. of hydrocyanic acid. As 1,000 grain measures of this volumetric solution contain $\frac{1}{10}$ th of an equivalent in grains of silver nitrate, they correspond with $\frac{1}{10}$ th of an equivalent, or 5.4 grains of hydrocyanic acid. As 950 grain measures of the solution were required, it is evident that $\left(\frac{950 \times 5.4}{1000} =\right)$ 5.13 grains of hydrocyanic acid were present in the 324 grains of solution tested—a quantity equal to $\left(\frac{5.13 \times 100}{324} =\right)$ 1.583 per cent.

III. CHEMICAL COMPOUND.—A chemical compound is one which consists of two or more elementary substances united together in certain definite proportions, so that the resulting compound possesses properties essentially different from those of its constituents. The proportions in which the constituent elements unite are constant for any given compound, and they bear simple ratios to the proportions in which the same elements unite with one another, or with other elements, to produce other compounds. If nitrogen dioxide be brought into contact with air, or with oxygen, deep red fumes are produced, which consist principally of nitrogen tetroxide. As nitrogen dioxide does not behave thus with any known gaseous compound of oxygen, this reaction may be regarded as a proof that the atmosphere is a mechanical mixture of oxygen and nitrogen. Further

proof is afforded by the unequal solubility of these gases in water, combined with the fact that air in solution contains a much larger proportion of oxygen than ordinary air.

IV. GAS VOLUME.—The volume of hydrogen produced is 6559.251 cubic centimetres, and that of oxygen 3279.625 cubic centimetres. As $\frac{1}{5}$ th of the water is hydrogen, ($\frac{2}{5} =$) $\frac{1}{5}$ grammes of this gas is produced; at the standard temperature and pressure this weight would measure ($\frac{1}{.0896} =$) 6.2004 litres; to correct this volume for the given temperature and pressure, we have the proportion—

$$\begin{array}{l} 750 : 760 \\ 273 : 285 \end{array} \} = 6.2004 : x \therefore x = 6.559251.$$

This volume is equal to 6559.251 cubic centimetres, and half this volume, viz., 3279.625 cubic centimetres of oxygen is produced.

V. SPECIFIC GRAVITY.—The specific gravity of the sugar is 1.0799. The 10 grammes of sugar displace ($87.2 + 10 - 89.125 =$) 8.075 grammes of turpentine; therefore its specific gravity, referred to turpentine, is ($\frac{10}{8.075} =$) 1.238; multiplying this by .872, the specific gravity of the turpentine, we get the above result.

Prizes.

The First Prize for the best answers to the questions of the First Division, printed in our May number, has been awarded to

F. W. FLETCHER, Totton, Southampton,

to whom a second prize was awarded in January.

The Second Prize for the best answers to the questions of the Second Division has been awarded to

J. BRADLEY, Bingley, Yorkshire.

Marks awarded for Answers.

First Division.

| | I. | II. | III. | IV. | V. | VI. | E. | Total. |
|-------------------------------|----|-----|------|-----|----|-----|----|--------|
| F. W. Fletcher (1st prize) .. | 6 | 7 | 7 | 7 | 5 | 5 | 3 | 40 |
| B. B. | 6 | 6 | 7 | 7 | 5 | 5 | 3 | 39 |
| J. T. | 6 | 7 | 6 | 6 | 5 | 5 | 3 | 38 |
| P. L. | 5 | 6 | 7 | 7 | 3 | 5 | 3 | 36 |
| H. C. Webb | 8 | 6 | 6 | 7 | 5 | 0 | 3 | 35 |
| A. Fraser | 5 | 6 | 7 | 7 | 5 | 0 | 3 | 33 |
| Canadensis | 6 | 7 | 6 | 0 | 5 | 5 | 3 | 32 |
| J. W. Smith | 4 | 5 | 2 | 7 | 5 | 5 | 2 | 30 |
| Omega | 4 | 4 | 6 | 7 | 5 | 0 | 2 | 28 |
| Otho | 5 | 5 | 0 | 0 | 4 | 0 | 2 | 16 |

Second Division.

| | I. | II. | III. | IV. | V. | E. | Total. |
|---------------------------|----|-----|------|-----|----|----|--------|
| J. Bradley (2nd prize) .. | 7 | 6 | 4 | 5 | 5 | 3 | 30 |
| J. Walker | 6 | 6 | 5 | 3 | 5 | 3 | 28 |
| Graham | 6 | 7 | 6 | 0 | 5 | 3 | 27 |
| H. B. | 7 | 7 | 5 | 0 | 5 | 3 | 27 |
| J. J. Macaulay | 5 | 5 | 5 | 7 | 0 | 3 | 25 |

TO CORRESPONDENTS.

*. All questions forwarded to us for publication in this "Corner for Students" should be accompanied by the answers which the propounders believe to be correct. Communications should include the names and addresses of the writers; those which reach us after the fifteenth day of the month succeeding that in which the questions appear will be disregarded.

Prizes.—The students to whom prizes are awarded are requested to write at once to the publisher naming the book they select, and stating how they wish it forwarded.

J. T.—III. The atomic weights which we employ are those given in the *Pharmacopœia*.

H. C. Webb.—III. Twenty-three places of decimals are quite unnecessary, we do not require results expressed in more than three places of decimals; but, of course, in working out problems, you may carry the fraction to any extent you like. V. 1 cubic centimetre = 1,000 cubic millimetres, but 1 centimetre = 10 millimetres.

A. Fraser.—II. There is little doubt that fresh chlorinated lime is not a true compound, but a mechanical mixture, chiefly of calcium chloride and hypochlorite. As it increases in age calcium chlorate is produced at the cost of the hypochlorite. V. Decimal point misplaced.

Canadensis.—See remark to J. T. IV. You have taken the cwt. as 100 pounds instead of 112.

Omega.—You cannot compete in more than one division at the same time. If you send us a neat paper, with clear explanations, and employ good methods of calculation, you are certain to get high marks in the column E.

Otho.—III. The weight of a litre of chlorine was given in the question, in order that you might employ it in the calculation. IV. We must remind you that 1 cwt. is 112 pounds, not 212. V. Decimal point eight places too many to the right. A piece of copper wire about as thick as a small knitting-needle, and about 22 yards long, weighing more than three million tons! Improbable.

J. Bradley.—III. It is perfectly true that the elementary substances in a chemical compound are chemically combined, but we wanted you to explain the meaning of *chemically* combined, showing how it differs from *mechanically*. You have done very well for the first time.

Graham.—IV. The volume of a gas is increased by a diminution of pressure and increase of temperature; your answer represents the opposite change.

H. B.—III. The remarkable difference between the properties of a chemical compound and those of its constituents is one of the most important features that distinguish it from a mechanical mixture. IV. Your error consisted in multiplying the weight of hydrogen instead of dividing it by the given weight of a litre of hydrogen.

J. J. Macaulay.—II. Some explanation of the methods of calculation employed is necessary. V. In ascertaining the weight of water equivalent to the turpentine displaced, you transposed the figures in the first and second terms of the proportion.

We received one paper which does not appear above, as it did not include the name and address of the sender.

Books offered as First Prizes.

- Attfield's *Chemistry: General, Medical, and Pharmaceutical*. (Van Voorst.)
 Balfour's *Manual of Botany*. (Black.)
 Brooke's *Elements of Natural Philosophy*. (Churchill.)
 Conington's *Handbook of Chemical Analysis*; with Tables of Qualitative Analysis adapted to the same. (Longmans.)
 Eliot and Storer's *Manual of Inorganic Chemistry*. (Van Voorst.)
 Fownes's *Manual of Elementary Chemistry*. (Churchill.)
 Fresenius's *Qualitative Analysis*. (Churchill.)
 Galloway's *Qualitative Analysis*. (Churchill.)
 Galloway's *Second Step in Chemistry*. (Churchill.)
 Ganot and Atkinson's *Elementary Treatise on Physics*. (Longmans.)
 Garrod's *Materia Medica*; with Modern Chemical Notation. (Walton.)
 Noad's *Chemical Analysis, Qualitative and Quantitative*. (Reeve.)
 Northcote and Church's *Qualitative Analysis*. (Van Voorst.)
 Odling's *Outlines of Chemistry*. (Longmans.)
 Royle and Headland's *Materia Medica*. (Churchill.)
 Williamson's *Chemistry for Students*. (Clarendon Press.)
 Barff's *Introduction to Scientific Chemistry*. (Groombridge.)

[Any other scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.]

Books offered as Second Prizes.

- Balfour's *Elements of Botany*. (Black.)
 Bloxam's *Laboratory Teaching*. (Churchill.)
 Church's *Guide for Students in Agricultural Chemistry*. (Van Voorst.)
 Galloway's *First Step in Chemistry*. (Churchill.)
 Gill's *Chemistry for Schools*. (Walton.)
 Hofmann's *Introduction to Modern Chemistry*. (Walton.)
 Huxley's *Lessons in Elementary Physiology*. (Macmillan.)
 Oliver's *Lessons in Elementary Botany*. (Macmillan.)
 Orme's *Introduction to the Science of Heat*. (Groombridge.)
 Potts's *Elements of Euclid*. School Edition. (Longmans.)
 Roscoe's *Lessons in Elementary Chemistry*. (Macmillan.)
 Wornach's *Elementary Course of Mechanics*. (Groombridge.)
 Wurtz's *History of Chemical Theory*. Translated by Watts. (Macmillan.)

[Any other scientific book which is sold for about five shillings may be taken as a second prize.]

Pharmacy.

THE Newark (U.S.) Pharmaceutical Association has adopted a set of formulæ for certain non-official preparations, some of which seem likely to be useful and elegant media for the administration of some popular medicines. We are indebted to the *Pharmacist* for their publication.

Wine of Beef and Iron.—

| | | | |
|-------------------------------|----|----|-------------------|
| R̄ Extracti Carnis (Liebig's) | .. | .. | 1 oz. |
| Ferri Citrat. | .. | .. | 96 grs. |
| Vini Ferri | .. | .. | 16 oz. |
| Syrupi | .. | .. | 2 oz. |
| Pimentæ (contus) | .. | .. | $\frac{1}{2}$ dr. |
| Aquæ | .. | .. | q. s. ft. 24 oz. |

Dissolve the extract beef in 4 oz. of water, and add the allspice—after standing 10 hours, add the wine and syrup, then the citrate of iron, previously dissolved in 2 oz. of water—filter.

Each fluid ounce contains: fresh beef, 1 oz.; citrate of iron, 4 grains. Dose, one tablespoonful.

Nutritive Wine. Liebig's Extract of Beef and Wine.—

Prepared same as above, omitting the citrate of iron.

Elizir Calisaya.—

| | | | |
|-------------------------|----|----|-------------------|
| R̄ Cort. Ciuchonæ flav. | .. | .. | $\frac{1}{2}$ oz. |
| " " (Calisaya) | .. | .. | $\frac{1}{2}$ oz. |
| " Aurantii | .. | .. | $\frac{1}{2}$ oz. |
| Sem. Coriand. | .. | .. | 2 dr. |
| Cocci Caeti | .. | .. | 1 dr. |
| Spts. Vini. Rect. Deod. | .. | .. | 12 oz. |
| Aquæ | .. | .. | 10 oz. |
| Glycerini | .. | .. | 5 oz. |
| Syrupi | .. | .. | 5 oz. |

Reduce the barks, etc., to a moderately fine powder, and pack firmly in a percolator; mix the deodorized spts. water, glycerine and syrup, adding enough water to make two pints of percolate, to which add 20 grains powdered tartaric acid, and after standing 24 hours—filter.

Each fluid ounce contains: 16 grains cinchona bark.

Elizir Pyrophos. Iron and Quinine.—

| | | | |
|--------------------|----|----|----------|
| Rx Ferri Pyrophos. | .. | .. | 160 grs. |
| Quinæ Sulph. | .. | .. | 10 grs. |
| Spts. Vini. Deod. | .. | .. | 2½ oz. |
| Syrupi | .. | .. | 3 oz. |
| Aquæ | .. | .. | 9½ oz. |
| „ Flor. Aurantii | .. | .. | 5 oz. |
| Acid. Sulph. dil. | .. | .. | q. s. |

Dissolve the pyrophosphate iron in the water, and add the syrup; then dissolve the quinine in the orange flower water, with as little diluted sulph. acid as possible, and gradually mix them. Filter.

Each fluid ounce contains: pyrophos. iron, 8 grains; sulph. quinine, ½ grain.

Elizir Quinine, Iron, and Bismuth.—

| | | |
|------------------------------------|----|----------|
| Rx Elizir Ferri Pyrophos. et Quinæ | .. | 16 oz. |
| Bismuth, Citra. Ammon. | .. | 128 grs. |

Dissolve.

Each fluid ounce contains: 8 grains pyrophos. iron; 8 grains citrate bismuth; ½ grain quinine.

Elizir Pyrophos Iron, Quinine, and Strychnine.—

| | | |
|------------------------------------|----|--------|
| Rx Elizir Ferri Pyrophos. et Quinæ | .. | 16 oz. |
| Strychniæ | .. | 1 gr. |

Dissolve.

Each fluid ounce contains: pyrophos iron, 8 grains; quinine, ½ grain; strychnia, 1-16th grain.

Wine of Pepsin.—

| | | |
|----------------------|----|----------|
| Rx Pepsin (Hawley's) | .. | 160 grs. |
| Vini. Xerici | .. | 16 oz. |
| Acid. Mur. Dil. | .. | 1 dr. |

Triturate the pepsin with 4 ozs. of wine mixed with acid. Pour this upon a filter, and pass the balance of the wine through it.

Each fluid ounce contains: Hawley's pepsin, 10 grs.

Eliz. Aromatic.—

| | | |
|-------------------|----|---------|
| Rx Cort. Aurantii | .. | 4 drs. |
| Sem. Coriand. | .. | 2 drs. |
| „ Angelicæ | .. | 2½ drs. |
| Cocci Cacti | .. | 1 dr. |
| Spts. Vini. Deod. | .. | 12 oz. |
| Aquæ | .. | 10 oz. |
| Glycerini | .. | 5 oz. |
| Syrupi | .. | 5 oz. |

Percolate 2 pints.

A pleasant vehicle for administering nauseous remedies.

Eid. Val-Ammonia.—

| | | |
|-----------------------|----|---------|
| Rx Ammoniæ Valerianat | .. | 96 grs. |
| Fl. Ext. Vanil | .. | .. |
| Tr. Cardam. Comp. aa | .. | ½ oz. |
| „ Xanthoxyl | .. | 2 drs. |
| Syr. Auranti Cort. | .. | 6 drs. |
| Aquæ | .. | 4 oz. |

Dissolve the valerianate of ammonia in the water, and add the other ingredients, previously mixed.

Two grains val-ammon. to each drachm.

Comp. Syrup of Hypophosphites and Iron.—

| | | |
|--------------------|----|----------|
| Rx Hypophos. Sodæ, | .. | .. |
| „ Calcis, | .. | .. |
| „ Potassæ aa | .. | 256 grs. |
| „ Ferri | .. | 126 grs. |
| Aquæ | .. | 12 oz. |
| Sacch. Alb. | .. | 18 oz. |

Dissolve the hypophosphites in the water in a water bath, and filter. Add sufficient water to make up for the evaporation. Add sugar—and apply gentle heat to make syrup—21 oz.

Each fluid ounce contains: hypophosphite soda, lime, and potass, 12 grains each; hypophos. iron, 6 grains.

Comp. Syrup of Hypophosphites.—

Same as above, omitting the iron.

Chemical Food.—

Rx Parrish's formula, omitting cochineal and muriatic acid. See U. S. D.

Each teaspoonful contains 1 grain phosphate of iron, 2½ grains of lime and the other alkaline phosphates.

Elizir Pepsin, Bismuth, and Strychnine.—

| | | |
|----------------------|----|----------|
| Rx Pepsin (Hawley's) | .. | 256 grs. |
| Bismuth Citrat. | .. | 64 grs. |
| Strychniæ | .. | 1 gr. |
| Aq. Flor. Auranti | .. | 6 oz. |
| Spirit Vini Deod. | .. | 2 oz. |
| Aquæ | .. | 4 oz. |
| Glycerine (pure) | .. | 2 oz. |
| Syrupi | .. | 2 oz. |

Triturate the pepsin with the water and glycerine, and filter; dissolve the bismuth in 2 oz. orange flower water, with a few drops of aqua ammonia; dissolve the strychnine with a few drops of acetic acid. Add the bismuth solution to the pepsin, then the balance of the fluids, and finally the solution of strychnia.

Each fluid ounce contains: pepsin, 16 grains; citrate bismuth, 4 grains; strychnine, 1-16th grain.

Ferro-Phos. Elizir Gentian.—

| | | |
|-------------------|----|----------|
| Rx Cort. Aurantii | .. | 1 oz. |
| Sem. Coriand. | .. | 1 dr. |
| Macis | .. | 1 dr. |
| Rad. Gentian. | .. | 1 oz. |
| Spts. Vini Deod. | .. | 4 oz. |
| Aquæ | .. | 4 oz. |
| „ Flor. Aurantii | .. | 2 oz. |
| Syrupi | .. | 6 oz. |
| Ferri. Pyrophos. | .. | 256 grs. |

Reduce the roots, seeds, etc., to a moderately fine powder, pack in a percolator—mix the spirits and waters, and percolate 10 ounces. Dissolve the pyrophosphate of iron, add the syrup and filter.

Each fluid ounce represents: 16 grains pyrophos. of iron; 30 grains gentian.

A NEW VESICANT.

The insect creation has already yielded a most effective and powerful vesicant in the Cantharis, or Spanish fly, and it appears that other of its winged members possess similar irritant properties. A fly about twice the size of the Spanish variety, called the Andol Andol, of a dull dirty leaden colour, and resembling the Australian blow-fly in general appearance, is found in China in great abundance. It seems to possess active vesicating powers, which are extracted by rectified spirit. Applied to the skin in this form, it raises a blister most effectually in a few hours. Dr. J. Roxburgh Wylie writes to the *Australian Medical Journal*, that the Dutch apothecaries of Java import the fly largely, and prepare from it a tincture known as Tinct. Andol Andol. Before applying it, the skin is washed first with soap and water and then with vinegar; the tincture is then painted on, and Dr. Wylie asserts that he has used it extensively, and never known it to fail.

PRESERVATION OF THE OILS OF LEMON AND ORANGE.

It is a subject of common observation that the above essential oils are very prone to deteriorate, both in flavour and smell, by keeping. From trustworthy experiments (Carl Fruh, *Am. Journal of Pharmacy*), it appears that the temporary addition of alcohol is very effective in preserving these oils. The following is the method recommended:—To each pound of oil add 1 oz. of alcohol, and mix well by shaking; then add 1 oz. of water. The alcohol shows its affinity for the latter, and separates almost entirely from the oil, finally collecting at the bottom of the bottle. A resinous film is observed on the surface of the dilute alcohol, and probably this resinous matter is the result of oxidation by the atmosphere, and its removal would therefore go far to explain the improvement in the oil. It is worthy of remark that the resinous film appeared less in quantity with lemon than orange, and the latter oil is known to spoil the sooner.

LITERARY MONOMANIACS.

ONE of the most interesting, and at the same time one of the most curious, subjects in physiological science is the study of monomania. Baffling the investigator as to its cause, and bewildering him with its startling effects, it seems governed by no laws in its origin, and restrained by no force in its development. All the more remarkable from its utter incongruence, it lays hold of men whose wisdom, upon all subjects but one, is well-nigh boundless, and brings them down in their comprehension of this exceptional subject to a level with the greatest lunatic in existence. Some such species of madness seems to afflict journalists and newspaper writers whenever they approach the subject of pharmacy or pharmacists.

Just turn over a few numbers of one of the medical journals, or, better still, look over a newspaper report of any case of poisoning—accidental or otherwise—and you will soon find unmistakable symptoms of the mania referred to. On opening my *Graphic* at the breakfast table on the morning of the 8th inst., to get a glimpse of its well-filled pages, a short article on a recent case of poisoning at Islington caught my eye. Judging from the usual excellence of the journal I thought the writer might reasonably be expected to conclude without a “left-hander” at unfortunate druggists. But no! He was evidently suffering from pharmacy on the brain; and it was a decided case of monomania. Severe, indeed, must have been the attack, for it carried him far outside the bounds of orthography, grammar, and, I regret to say, of truth also. He first enunciated, as a “bright idea,” the suggestion of the Islington jury that “chemists and dispensers of medicine generally should be compelled to keep all poisonous packets in paper of a distinct colour reserved expressly for that purpose.” It would, I fancy, be far better policy on the part of these very reforming gentlemen if, before they let the “compulsion” cat out of the bag, they were to obtain for us a little of this wonderful paper, which is to prove a panacea for poisons—to secure immunity to us and safety to the public. Of course, when they have selected their “colour,” they will lose no time in getting an Act passed, decreeing all sorts of fines and penalties upon anyone using it for other than “poisonous substances”—a very comprehensive term certainly! “There is, we believe,” the article goes on to say, “a *Society of Chemists and Druggists who are (sic) very conspicuous at times in urging upon the Legislature the necessity of forbidding anybody to prepare prescriptions who has not passed an examination in Hecate and Virgil.*” Now, either the writer’s vision must be dreadfully defective, or else the “Society” must be very mythical indeed, if he only believes that it is *very conspicuous*; and it seems scarcely in accordance with the principles of Lindley Murray to say, “There is a *Society—who are conspicuous.*” Considering, moreover, that the Pharmaceutical Society is the only “Society of Chemists and Druggists who are” known in Great Britain, the writer has certainly given free scope to his fancy. However, when he has a Wednesday to spare, he will, I hope, find his way to Bloomsbury-square, and have patience enough to wait till the “Virgil and Horace” examinations come on, unless, indeed, like the jovial “claimant,” he considers Cæsar and Virgil are synonymous. “But it would, perhaps,” the *Graphic* concludes, “be more to the point if *they (i.e., the Society)* joined in *recommended (sic)* the trade to make some little distinction between the external appearance of harmless and poisonous powders.” Well, yes! And perhaps it would be a good deal more to the point if the next time the *Graphic* gives us advice gratis it will confine itself to facts and to English.

And what of the poor pharmacist? Why, the old tale told once more: at first ridiculed for his ignorance, he is now lectured for his attainments, a social shuttlecock driven hither and thither by the battledores of the press, till, like Mahomet’s coffin, he is literally “nowhere;” he is a scapegoat upon whom are laid the mistakes of the prescriber on the one hand, and the vagaries of a nervous public on the other, till, bowed down by his burdens, we should almost expect the Society for the Prevention of Cruelty to Animals to interfere on his behalf, were it not that we feel convinced that that admirable Association has lately taken an excessive dose of chloral hydrate.

Seriously, however, can nothing be done to stay the

mischievous which is being wrought by such careless writers? Coming from reliable sources the public naturally swallow these gilded pills of terror—to their infinite discomfort—and therefore, on this account, while not dreaming of any leniency at the hands of our censors—not even questioning the justice of the conclusions at which they think proper to arrive—we do ask—nay, more, we demand as a right—that the charges brought against us shall not be, as they so often have been, utterly destitute of any foundation.

QUILL PEN.

Provincial and Foreign Reports.

[We shall be glad to receive from all parts of the world items of interest to our readers. Correspondents who favour us with reports of local meetings, etc., will please to condense them as much as possible; and when local newspapers are sent, we shall be glad to have the passage intended for our notice specially marked.]

BIRMINGHAM.

MIDLAND COUNTIES CHEMISTS’ ASSOCIATION.

PRESIDENT: GEORGE DYMOND. Treasurer: EDWARD SNAPE.—At a Council meeting held in the library of the above association, on Friday last, the following circular was ordered to be printed and circulated amongst the chemists of the Midland Counties.

“MIDLAND COUNTIES CHEMISTS’ ASSOCIATION.

“Library and Club Rooms,

“No. 24, Quadrant Chambers,

“(Top of Worcester-street), Birmingham.

“DEAR SIR,—At the last meeting of the Council of this Association, it was resolved to endeavour to extend its operations and the sphere of its usefulness, by taking more active cognizance of the various questions relating to trade and education, which have especially arisen out of the Pharmacy Act of 1868, and by providing rooms in Birmingham for the transaction of the business of the Association—for the general purposes of a trade office, reading and club rooms, and for any other objects connected with the interests of chemists and druggists.

“The Midland Counties Chemists’ Association is not without its records of useful services. Amongst these may be mentioned the successful influence (as the Council believe) which it has brought to bear upon the Government in the framing of the Petroleum Act, in a form which it is expected will be acceptable to chemists—in the providing of excellent courses of lectures for students in chemistry and pharmacy, in the winter of 1869-70, and in the compilation of the ‘Midland Counties Chemists’ Price Book,’ which has had so much demand that a second edition is already issued. And yet, having regard to the important interests of the great Midland district, the Council are conscious that the Association has not yet risen to the full position which it ought to occupy. Twenty years ago, the ‘Birmingham Pharmaceutical Institution’ was second to none in the provinces, but since its decadence, associations of chemists in other great centres, such as Liverpool, Manchester, Leeds, Nottingham, Bristol, have conspicuously come to the front, and now maintain, with unabated ardour, the vigilant supervision of whatever relates to the interests and welfare of pharmacy. They have each their representatives in the Council of the Pharmaceutical Society in London, whilst the chemists of the Midland counties of England and Wales, covering an area of more than 100 miles from east to west, or from north to south, with Birmingham for their commercial centre, do not possess a powerful organization, and do not now possess one representative at the London Board.

“It is with the intention of remedying this state of things that the Council of the Midland Counties Chemists’ Association now makes an appeal to all chemists residing within the vast district of which Birmingham is the centre, to unite together in the formation of a vigorous Association. The passing of the Pharmacy Act of 1868 has imposed upon chemists the necessity of a higher education, which will in

due course of time elevate the general character of the trade, and invest it with greater responsibilities. The provision of facilities for the education of young men in pharmacy, chemistry, etc. etc., is rendered easy in Birmingham, where appliances for this purpose exist in abundance. The Council of the Association invite young men, desirous of availing themselves of courses of lectures in aid of their studies, to communicate early with the honorary secretaries, who will give them information of the terms on which classes in connection with the Queen's College may be formed.

"Besides these just claims upon the services of such an Association as this, there are others affecting the privileges of chemists and druggists under the Pharmacy Act, of which the Association will take cognizance. It is well known that there are persons who continue with impunity to sell poisons, who are not registered under the Act, and who thus render themselves obnoxious to the law, but who, in the absence of any prosecutor, escape its penalties. All members of the Association are invited to report to the Council any cases of the evasion of the Pharmacy Act which they are able to substantiate, and measures will thereupon be taken to protect the privileges of its members in this respect.

"The Council will also make it their business to watch the various questions on which (like the present 'Amended Pharmacy Act,' now before the House of Commons), the expression of opinion throughout the country is so important. It may be here mentioned that the Council have sent one petition to Parliament on this question, and have set on foot another to be signed by individual chemists, praying Parliament to suspend the present Act until the recent "recommendations" of the Pharmaceutical Council have been tried, or until all other dispensers of medicine in Great Britain are included in one measure of regulation.

"It will also be the duty of the Council of the Association at the next election of the Council of the Pharmaceutical Society, to insist upon the claims of Birmingham and the Midland Counties to one seat (at least) on the Board in London, of which this district has been deprived by the action of other Associations.

"The offices of the Association, which are now open at the Quadrant Chambers, Birmingham, are furnished with the nucleus of what it is hoped will become a useful library of reference and research for chemists, in all questions affecting their trade occupation, and for assistants desirous of qualifying themselves for the examinations. Periodicals are laid upon the table, and there is accommodation in the rooms for the reception and display of any trade novelties which manufacturers or firms in business may desire to bring under the notice of druggists; the only condition required in sending such articles being, that they shall become the property of the Association, and be sent carriage paid.

"Meetings of the Association will be held in these rooms on the first Friday in each month, at 3 o'clock p.m., for the transaction of business. All members throughout the Midland Counties are earnestly invited to attend these meetings, and to support them by their influence. The rooms will be freely at the service of all assistants and apprentices (members of the Association), where they may hold meetings, read original papers, and use them for the purposes of a club. The rooms will be open from 10 a.m. to 10 p.m. All chemists (members of the Association) and their friends are invited freely to make use of the accommodation they afford by making it a general rendezvous—Chemists' Exchange—Club Room—Reading Room—Writing Room—House of Call, &c. &c., and a place of neutral ground for meeting trade travellers, for whose samples, if desired, one of the rooms may be occasionally engaged.

"It remains only to add, that to promote these varied objects, an increase of the income of the Association is necessary. At present 102 gentlemen are members of it. It will need an increased number of members, and of subscriptions, to maintain the objects in view efficiently. The *minimum* subscription is 5s. per annum for principals, and 2s. 6d. per annum for assistants and apprentices of chemists. Many voluntary subscriptions, however, on a more liberal scale, are already offered and made, as well as liberal donations towards the preliminary expenses of the offices.

"We beg to enclose you a form for your subscription for

the current year (commencing at Midsummer), and we invite at the same time your hearty co-operation in maintaining the objects of the Association in a manner worthy of the Midland Counties of England.

"JOSEPH LUCAS, } Hon. Secs."
"WALTER R. JONES, }

BOLTON.

THE PHARMACY BILL.

A MEETING of the Committee of this Association was held on Tuesday, June 20th, to consider the desirability of taking steps to oppose the passage through the House of Commons of the Pharmacy Bill, 1871, when it was unanimously decided that the petition received from the Manchester Defence Association, and which had been signed by almost every member of the trade in the district, should be forwarded to our senior member for presentation, together with the following resolution:—

"That the petition signed by almost every chemist and druggist in Bolton, Farnworth, Atherton, and Tyldesley, be forwarded to John Hick, Esq., M.P., as senior member for the borough, for presentation in the House of Commons, and that Lieut.-Col. Gray, M.P., be supplied with a copy of the same, and earnestly requested to support it."

The Committee also beg to submit that the feeling of the whole trade in this district is most decidedly against the imposition of such an uncalled for interference with the rights and liberties of persons conducting the business, and when it is considered that, from the statistics proved, the gross average of deaths, through either carelessness or misadventure, is only one and a-half persons per annum for the population of the whole kingdom, there is surely no sufficient reason for such vexatious proceedings. This feeling is most forcibly expressed in the following extract from a resolution forwarded for presentation to the Pharmaceutical Council in April last:—

"That the poisons' regulations proposed by the Pharmaceutical Council are at the present time quite unnecessary, inasmuch as that by the recent Act of Parliament a very rigid examination for future Chemists and Druggists is rendered compulsory, and it is considered that with such an educational status the safety of the public is most effectually provided for, and that as the said regulations cannot be carried out without inspection, it is felt to be a most unjust and inquisitorial interference with the liberties of a body of tradesmen, recognised as almost approaching the medical profession, who are not to be affected by such proposed legislation.

HULL.

At a meeting of the trade held on July 11th at the Cross Keys Hotel, Market-place, which was well attended, on the motion of Mr. Earle that Mr. Baynes take the chair, which was seconded by Mr. Smith, and carried, the following resolutions were unanimously adopted:—

1st.—That this meeting having carefully considered the proposed Government amendments to the new Pharmacy Bill, acknowledges the desire of the Right Honourable W. E. Forster to meet the wishes of the trade, but is of opinion that the compulsory and penal clauses of the amended bill are highly objectionable, and would fail to accomplish the objects sought, and strongly urges the withdrawal of the bill, or reference to a select committee, it being impossible to deal with the question of poisons during the present session of Parliament, and without full information on the subject.

2nd.—That in the interests of the public, and on principle, this meeting strongly objects to any compulsory regulations or penal restrictions, which do not apply to all dispensers of poisons alike, whether keeping open shops or not.

3rd.—That the best and most effective protection against accidental poisoning is the competency of the dispenser, and this being provided for by the Act of 1868, and registered chemists being already under stringent regulations in the sale of poisons, and heavy responsibilities in the event of culpable negligence, and abundant evidence having been

found during the recent agitation that great care is exercised by them in the dispensing and storing of poisons in the manner best adapted to their respective businesses, so as to ensure freedom from accidents, this meeting is of opinion that no necessity exists, nor that any ease can be established for special legislation in the case of registered chemists.

4th.—That the preamble of the Pharmacy Act 1868, declaring it is expedient for the safety of the public "That chemists and druggists should possess a competent, practical knowledge of their business," will be best complied with, and the object attained, by the Pharmaceutical Society devoting itself energetically to the advancement of pharmaceutical education, especially in the provinces, and that any action taken by the Society having reference to the internal management of pharmacies should be in the form of suggestions or recommendations only, it being, in the opinion of this meeting, impossible to frame regulations, which could safely or judiciously be made compulsory on all chemists throughout the kingdom.

5th.—That the secretary be instructed to forward a copy of the foregoing resolutions to the members of Parliament for the borough and East Riding, asking them still to oppose the bill.

LEEDS.

PHARMACY BILL.

A MEETING of registered chemists was held on Wednesday July 12, at the Philosophical Hall, Leeds, Mr. W. SMEETON President of the Leeds Chemists' Association, in the chair.

The following resolutions were carried unanimously:—

Moved by Mr. G. WARD, F.C.S., and seconded by Mr. E. YEWDALE:—

"That this meeting has carefully considered the amendments to the Pharmacy Bill offered by the Rt. Hon. W. E. Forster. It thankfully recognises them as improvements, and their introduction as supplying an ample justification of past opposition to the bill. Viewing the amended bill upon its merits, this meeting feels compelled to record its opinion that, by its partial application to dispensers of medicine, it would cause increased danger to the public; would be harsh and unjust towards those to whom it applies; and that its inconsistencies would bring into disrepute the principle of the systematic storing of drugs."

Moved by Mr. S. TAYLOR, and seconded by Mr. J. DAY:—

"That copies of the foregoing resolution be sent to the members for the borough and the division of the West Riding, and that they are requested to give Mr. Torrens the support of their votes in opposing the bill, or at least promote its being referred to a select committee for further inquiry."

The thanks of the meeting were voted to the Chairman.

MANCHESTER.

THE NEW PHARMACY BILL AND AMENDMENTS

COPY of resolutions unanimously passed at a meeting of pharmaceutical chemists, and chemists and druggists, held at the Memorial Hall, Albert-square, Manchester, July 12th, 1871.

Moved by Mr. GILL, seconded by Mr. KERFOOT:—

"That this meeting of the pharmaceutical chemists, and chemists and druggists of Manchester and vicinity, is of opinion that the amendments to the Pharmacy Bill do not remove or mitigate the objections to the proposed legislation, and desires to express its determined and continued opposition to the bill.

"1st.—As it deprives the members of the Society of a constitutional right conferred by Clause 1 of Pharmacy Act, 1868.

"2nd.—It introduces into an Act of Parliament legislation for minute details of internal business arrangements, which would expose chemists to great inconvenience, from the large number of articles to which regulations would apply, and the varying interpretation put on the requirement.

"3rd.—That as the Act of 1868 makes full provision for sale

of poisons, and prescribes educational qualifications for all dealers, the public is amply protected, and further legislation for storing is uncalled for and unnecessary, and would indeed be prejudicial, as tending to weaken the sense of personal responsibility.

"4th.—That the imposition of heavy penalties for undefined offences will be most unjust, vexatious to the trade, and against public interest.

"5th.—That the strong and almost unanimous expression of opinion from the trade is entitled to respect, and as the amendments proposed do not touch the objectionable principle of the bill, as interfering unduly and unjustly with the freedom of an educated and responsible body of men, it is hoped that members of Parliament will not relax their efforts to procure the withdrawal of the measure.

Moved by Mr. R. HAMFORD, seconded by Mr. W. WILKINSON:—

"That a copy of the resolution be forwarded to all members of Parliament."

NOTTINGHAM.

At a large and important meeting of the chemists of Nottingham and district, held at the rooms of the Nottingham and Nottinghamshire Chemists' Association, the following resolutions were unanimously adopted:—

Moved by Mr. WATERALL, seconded by Mr. PARKER:—
"That the objections of this meeting to the Pharmacy Bill now before Parliament are,

"1st. That the Act of 1868 did not pledge the Pharmaceutical Society to institute regulations of a compulsory character, for the dispensing, keeping, and selling, of poisons.

"2nd. That such regulations are unnecessary, an unwarrantable interference with the freedom, and an insult to the intelligence, of the chemists, as a body.

"3rd. That regulations only applying to those keeping open shop, and not to all dispensers of medicine, is partial and unjust.

"This meeting, having discussed and considered the proposed amendments to the Pharmacy Bill introduced by the Right Hon. W. E. Forster, and whilst acknowledging the concessions, regrets its inability to accept them as removing the objections to the bill."

Proposed by Mr. WHITE, seconded by Mr. JACKSON—

"That the resolutions passed at this meeting be forwarded to the members of Parliament for the town and county of Nottingham, with the earnest request that they will continue to support the prayer of the petition already presented to the House against the bill."

NEWCASTLE-ON-TYNE.

A MEETING of the pharmaceutical chemists, and chemists and druggists of Newcastle-upon-Tyne and Gateshead was held in the College of Medicine, Newcastle, July 12th, 1871, to consider the alterations proposed to be made in "The Pharmacy Act Amendment Bill." J. W. SWAN, Esq., in the chair.

The bill, as first printed, together with the proposed amendments, having been read and considered,

It was moved by Mr. SWAN, seconded by Mr. HUNTER, and resolved—"That this meeting sees in the new Pharmacy Bill an uncalled for, premature, and dangerous unsettling of the Act of 1868, under which poisons regulations are now in force, and which duly provides for the enactment of additional regulations, presumably on the necessity for such arising—that in the opinion of this meeting the question of the enactment of additional compulsory regulations is one of so delicate and dangerous a nature that its settlement demands the utmost care and deliberation at the hands of those who are practically acquainted with the subject; and that whereas there is an entire absence of public urgency in the case, and even considerable risk of increased danger resulting from hasty and impractical legislation, therefore it is desirable to allow the Act of 1868 to continue, without the interference of any new legislation."

Moved by Mr. BROCKETT, seconded by Mr. OWEN, and resolved—"That inasmuch as the principal portion of the

dispensing of medicines in Great Britain is performed by medical practitioners who will not be affected by the bill, even in its amended form, the proposed legislation would establish the striking anomaly, that poisons under the Act would, or would not, be subject to regulations according to the place in which they were dispensed, without any relation to their dangerous properties; this meeting, therefore, regards the measure as unwise, impolitic, and unjust."

Moved by Mr. COATES, seconded by Mr. HALL, and resolved—"That this meeting is of opinion that the regulations for the storing of poisons, contained in the schedule of the amended bill are unsuited to the case, and unlikely to produce any good results; and, further, that the schedule of poisons contained in the Act of 1868, intended to regulate the sale of poisons, is totally unfitted as a basis for regulations in respect to storage and dispensing."

Moved by Mr. ENO, seconded by Mr. JOBSON, and resolved—"That in the opinion of this meeting, the only safeguard at present needed, in addition to the regulations relating to the sale of poisons, imposed by the Act of 1868, is improved education, and that is already provided for by the compulsory powers of the Pharmaceutical Society, in respect to examinations."

It was announced by Mr. OWEN that in accordance with the resolution of a former meeting upwards of £40 had been subscribed by chemists in Newcastle and some of the surrounding towns, towards meeting past and prospective expenses connected with opposing obnoxious legislation, and that after paying expenses up to the present time he had been able to invest in a building society the sum of £25, that the Secretary might feel that there was a little fund at his back whenever he might see necessary to take prompt measures for the protection of the trade.

SHEFFIELD.

THE PHARMACY BILL.

A MEETING of the Council of the Pharmaceutical and Chemical Association was held on Monday, the 19th ult., for the purpose of considering the proposed Pharmacy Bill of 1871. There was a full attendance of members. Mr. DOBB, the President, in the chair.

The minutes of the previous meeting having been read and confirmed, the President introduced the subject which the Council had been called to discuss by reading the Bill which had passed through the House of Lords, and stood for second reading on June 26th. In a few brief remarks, he said he thought it was desirable some action should be taken by this Council, and he would wish to take its sense of the desirability or otherwise of petitioning the House of Commons against the Bill.

Resolved,—“That this Council offer the most strenuous opposition to the proposed Bill; that a petition be drawn up for presentation to the House of Commons by George Hadfield, Esq., the senior member for the borough; and that Messrs. Wilson and Preston be delegated to represent the views of the chemists and druggists of this town and neighbourhood at the conference to be held in London.”

Resolved,—“That the following letter accompany the petition, and be also forwarded to the county and borough members individually:—

‘Sir,—A petition, of which the enclosed is a copy, has been forwarded to the senior member for the borough of Sheffield for presentation to the House of Commons; the petitioners, therefore, respectfully solicit your opposition to any such partial enactment. The petitioners object that this “Amended Pharmacy Act” should be construed as one with the “Pharmacy Act, 1868,” the 16th clause of which reserves the right of apothecaries, veterinary surgeons, etc., who are thereby exempt from conforming to the regulations for the dispensing, selling, and keeping of poisons. The petitioners submit that any legislative action upon this subject should be strictly impartial, believing that persons registered under the “Pharmacy Act, 1868,” as chemists and druggists are as duly qualified to dispense, sell, and keep poisons, as apothecaries, veterinary surgeons, and medical students in the various public hospitals and dispensaries of Great Britain.”

A second meeting of the Council was held on Tuesday evening, the 27th ult., at the rooms of the Association, at which it was reported that the petition, bearing the signa-

tures of seventy-two chemists and druggists of this town, had been duly presented.

The following report (condensed) was presented by the deputation:—

“On Monday, June 26th, the deputation were honoured by an interview with George Hadfield, Esq., senior member for the borough of Sheffield. Your deputation urged upon the hon. member the several objections the great body of the chemists had to the Bill already passed by the House of Lords, and read for the first time in the House of Commons. After a general conversation, the hon. member promised his assistance. Your deputation also waited upon A. J. Mundella, Esq., junior member for the member, on the same day, and repeated the objections to the Bill, and also to the principles contained therein, who said he would aid to the best of his power. On Tuesday, June 27th, your deputation waited upon H. J. Beaumont, Esq., member for the West Riding of Yorkshire, who also expressed much sympathy with the objects of the deputation. Your deputation were unable to obtain any interview with Viscount Milton, the other member for the Riding, he being out of town through severe illness. Your deputation also sought an interview with S. Plimsoll, Esq., member for Derby; but, failing to meet him, a letter was despatched to his address. Your deputation, in conclusion, desire to record the kind and affable manner in which they were received by one and all the Members of Parliament with whom it was their pleasure to come in contact. Your deputation feel that the course taken by the Council has met with great success and encouragement.”

Mr. DOBB proposed,—“That the best thanks of this Council be given to Messrs. Wilson and Preston for the very energetic and admirable manner in which they had carried out the views of the Council.” This was seconded by Mr. Radley, supported by Mr. Cocking and Mr. Ward, and carried unanimously.

This concluded the business of the meeting.

Trade Memoranda.

WE have received from Messrs. Sanger and Sons their new (Midsummer) catalogue of patent medicines, which still continues to increase in bulk. To this class of business we notice they have lately added a department of druggists' sundries.

Mr. Frederick Stevens, of Detroit, Michigan, U.S., manufacturing chemist, whose preparation, “Sweet Quinine,” was so severely condemned by the American Pharmaceutical Association two years ago, has lately met with another enemy. His laboratory was burned down on the evening of June 11th, a damage of 15,000 dollars being reported.

Although the directors of the Metropolitan District Railway Company omitted—by oversight, we hope—to honour us with an invitation to the brilliant luncheon wherewith they inaugurated their new City terminus, we may take this opportunity of assuring them that, as our new neighbours, we welcome them very cordially. The “Mansion House” station of the line we have referred to is the next building to that in which the office of the CHEMIST AND DRUGGIST is located, and it will be manifest that this contiguity links us very close to the West-end of London. The wealthy advertising firms which are established in that district will therefore find our office now very easy of access, and they will find a journey to Cannon-street, for the purpose of arranging an announcement to the trade, a pleasant and profitable way of spending a wet morning.

Mr. Raston, of Maryport, writes to us that he has adopted our suggestion (last month), and has attached the word “poison” to each packet of his vermin killer.

At this time Messrs. Newbery and Sons are removing their business from St. Paul's Churchyard to 37, Newgate-street. Their new establishment will give them still more room for the dispatch of their constantly-growing business.

Will our readers be surprised to find in these columns an allusion to the extraordinary trial which has of late aroused so much public interest, and versed us all so thoroughly in the art of cross-examination? We have no special information to communicate on the case, but with much pleasure we call attention to an announcement in our pages from the Stereoscopic Company, offering to chemists and druggists the retail supply of the Tichborne portraits now in such immense demand, on liberal terms. A set of six is sold to the public in an envelope for five shillings. The series comprises the late Lady Tichborne—the late baronet—his son, the alleged “rightful heir,”—Sir Roger before his departure, “of a delicate constitution, rather tall and thin”—the “claimant,” who has fairly secured that title if he never gets the baronetcy—and a very graphic sketch in court.

We have been favoured with a copy of Messrs. Goodall, Backhouse and Co.'s new “Price List.” It appears both comprehensive and well-arranged, and the enterprising Leeds firm seem to have spared neither labour nor expense to render it both attractive in appearance, and useful as a book of reference. A novel feature in price currents is introduced, as the first page provides a diary for the month.

Mr. J. Davies, chemist, of Swansea, has acquired the right to manufacture and sell “Williams's Worm Lozenges,” a medicine, we believe, popular in Wales.

Feeding-bottles have been accused of a number of crimes, but a new one may now be laid to their charge. Infanticide, according to some authorities, has been a habit with them, but they have lately been occupied most liberally in the occupation of housebreaking. A number of them, accompanied by their manufacturer, Mr. William Mather, had decided on a new home, and an extensive site was fixed upon in Corporation-street, Manchester. So as to secure a substantial foundation, it was necessary to go to a greater depth than the retaining walls of some old buildings in the rear, amongst others that occupied by Messrs. Thomas Ravenscroft and Co., cotton waste merchants, Mark-lane, Hyde's-cross. These walls were consequently increased in depth by several feet of brick, and were supported by strong wooden props, supposed to be of sufficient strength. Messrs. Ravenscroft and Co.'s store was stocked with bales of cotton waste, and about four o'clock this morning a portion of the wall above the line of shops bulged out and fell into the open space below, carrying with it a number of bales. The crash resembled thunder, but when the fact became known, much consternation was caused among the denizens of Clock Alley, which the fallen building adjoins. An inspection of the walls still standing was sufficient to prove their instability, and about ten o'clock this forenoon, they also fell into the hollow, bringing away the roof. The remaining walls are evidently in a very shaky condition, and this forenoon workmen were busy setting up additional props. Abutting upon Messrs. Ravenscroft and Co.'s premises was the cellar of Messrs. Southam and Co., wine importers, and a quantity of wine was carried away amongst the *débris*. It is conjectured that the collapse was caused by the walls settling down during the heavy rain of this morning. Fortunately no one was injured.

For those who are wearied with the old-fashioned liquid sauces a new candidate has been introduced. The “Eastern” is unquestionably a sauce, but it is of the consistence of chutnee, and is sold in covered jars. It is described as a “delicious condiment.” We can endorse the statement, and we give our testimony willingly, for we are glad to see novelty in any form of trade enterprise.

The newest marking ink in the market, of which samples have been shown us, is that manufactured by Mr. John Granger, of Wood-street Works, Birmingham. It is accompanied with linen samplers, on which are printed most grotesque designs, an engraving of one of the quaint ideas being represented in our advertisement sheet. The style in which the bottles are put up in 6d., 1s., and 2s. 6d. cases, is deserving of the highest commendation, and will command the approval both of the trade and of the public.

We have been shown some very pretty perfumery novelties by Mr. J. H. Whitby. They are small bottles of scent, in the form of various fruits, resting on their leaves. It will hardly be a difficult matter to compete with nature this year if the continued absence of sunshine may be depended upon.

We note the change in title of a very well-known City firm in the drug trade. Messrs. Drew, Barron and Co., heretofore Drew, Hayward and Barron, is henceforth to be known as Barron, Squire and Co. Mr. Alfred Rook Squire is the new partner.

Mr. W. H. Atkinson, manufacturing chemist, of London, has brought out a plate polish, which, from its excellent qualities and the general attractiveness of the style in which it is put up, is likely to become exceedingly popular.

One of the Dublin daily papers contains an interesting account of Messrs. McMaster, Hodgson, & Co.'s large manufactory in that city. Those gentlemen give constant employment to nearly 200 hands. In addition to large chemical works, this firm, as our readers know, have attained a world-wide celebrity for their excellent fluid preparation of annatto and rennet. We have previously had an opportunity of expressing our high opinion of the quality of both of these preparations, to which it is evident Messrs. McMaster, Hodgson, & Co. have devoted much attention.

A meeting of creditors in the matter of William Hudson, chemist and druggist, Leamington, was held at the Bath Hotel to consider the best way of administering the estate. Liabilities estimated at about £1,100, including the two businesses of Bath-street and Regent-street. Mr. Lucas, of Spencer-street, was appointed trustee, with power to arrange for the sale of the two businesses. If these should realise £400, a dividend of 5s. in the pound will be paid as a first instalment to creditors.

The *British Medical Journal* states that a person named G. M. Rauffer puffs and sells for three shillings, under the name of “lemonade for strengthening the memory,” a fluid mixture of about 30 grammes, containing 15 parts of phosphoric acid, 15 of glycerine and 70 of water. This is sold in Vienna.

On the 24th ult., a woman, named Sophia Hudson, died in the Radcliffe Infirmary, Oxford, from the application of an anæsthetic. She was suffering from cancer in her breast, and it was thought advisable to administer bichloride of methylene to undergo an operation. After the bag containing the bichloride had been applied the deceased became livid, and after two or three convulsive gasps she expired.

The guardians of the Nottingham Union have selected the tender of Mr. F. White for the supply of drugs at the sum of £110 3s. 2d.

DEATH FROM CHLORAL HYDRATE.—On the 30th ult. an inquest was held in Huddersfield, on the body of Mr. J. S. Bowman, commercial traveller. It appeared that the deceased arrived in Huddersfield, on Wednesday, the 28th ult., and went to the George hotel. After tea he left the hotel and returned about 11 o'clock apparently sober, and retired to rest. In the morning not appearing at his wonted hour, the proprietor of the George becoming alarmed sent for a joiner to force open the bedroom door. Deceased was found lying in bed apparently asleep, but life was extinct. In a portmanteau was found a bottle containing chloral hydrate. It had been purchased at the shop of Mr. Rymington, Bradford, and the bottle contained six doses of 30 grains each. This had been purchased on the 27th, and from the small quantity left in the bottle it is supposed that the deceased took an excessive quantity. A verdict was returned in accordance with the evidence.



ENCOURAGEMENT.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—As a subscriber to your journal from the commencement, I beg to thank you for the spirited and admirable manner in which it is at present conducted. I think the whole trade are deeply indebted to you, as well insiders as outsiders, for the efforts you have made in keeping us posted up with regard to the attempts now being made to impose an iron yoke upon us.

I, for one, am grateful for the supplementary sheet published with your last number; the information contained in which was the means of rousing the trade throughout the whole kingdom. Still more do I value your liberality in supplying an extra number, which contained not merely an account, but a capital and full account of the interview of the deputation with Mr. Forster.

In view of these favours, as the French say, accept my distinguished regards.

Yours very faithfully,

J. F. SLUGG, F.R.A.S.

Manchester, July 5, 1871.

[It would be impossible for us to receive in perfect silence the large number of generously appreciative letters which our recent action has brought forth. We heartily thank our many correspondents for their words of encouragement, but we think they will comprehend our reason for inserting only a specimen of their eulogistic letters.—Ed. C. & D.]

THE "OUTSIDE" ORGAN AND THE "NOSIDE" ORGAN.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

DEAR SIR,—There used to be a conundrum about a man and his little dog which went neither before him, nor behind him, nor on one side of him. The unavoidable inference was that he went on the other side of him. The *Pharmaceutical Journal*, like the little dog, is trotting about somewhere, but it certainly is not to be found on either side at this moment, and we do not see it in front. We have no time to look round.

Yours faithfully,

SENEX.

CO-OPERATIVE STORES.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—I am much pleased to see that you have brought forward the co-operative store question again, and do hope that our Council will take active measures to try the legality of these stores dispensing medicines. It appears strange to me that we, as a body, do not trouble ourselves more about the matter, when we are being deprived of a fair portion of our income.

We complain that business is bad, which is not surprising, considering that one of these firms alone is effecting sales to the amount of about £500,000 per annum. I do not blame the promoters of the stores so much as those who supply them—those who have made their money and established a sale for their goods through us, and who, to gain a few pounds, do not hesitate to undermine our businesses.

Now, what I want to know is this: is it not in our power to compel them to give up supplying the stores? I think it is. If we act together, and, as far as possible, give up the sale of all proprietary articles supplied by the stores, and give up all business transactions with those houses connected with them, they would soon find that the stores would not prove such good customers as the chemists, and would, I think, soon be glad to get their goods sold through the legitimate channel again. This is the plan I and many of

my friends have adopted, substituting our own preparations for those on the store lists, and with no bad results.

I have just obtained a circular issued by a chemist in Kingsland, N., who, "in consequence of the stores having interfered with the sale of patent medicines, etc., has determined to sell at their prices." Does not this sound like a cry of alarm, and almost of despair, and does it not act as an advertisement to the co-operatives?

If we are to sell goods on these terms, I fail to see the advancement of pharmacy.

In conclusion, I would recommend every chemist to obtain possession of a store price-list.

FAIR PLAY.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—In the *Daily Telegraph* of this day, one of the advertising co-operative companies unblushingly states that "prescriptions are dispensed by a member of the Pharmaceutical Society." Perhaps we can scarcely expect that the Company should "blush" at such a circumstance. The member alluded to probably wears a mask. If he does not do so, he ought to do.

Yours, &c.,

A. STOPPER.

Maidstone, July 8th, 1871.

SEMI-OFFICIAL UTTERANCES.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

SIR,—Perfectly agreeing with the excellent remarks in your special issue of the 24th ult. on the position of chemists and druggists with regard to the Pharmacy Bill now before Parliament, I venture to hope that you will favour me by inserting, in your next journal, the accompanying letter, which I have addressed to the members of the Pharmaceutical Society, and should be glad to put before every chemist and druggist in Great Britain.

I am, Sir, your obedient servant,

GEORGE W. SANDFORD.

47, Piccadilly, London, July 11, 1871.

"SIR,—My long and intimate association with the Pharmaceutical Society, my seven years' experience of the duties of the presidency, and my personal connection with the Pharmacy Act of 1868, embolden me to believe that I shall, at least, be favoured with a fair hearing if I venture on the somewhat unusual course of addressing my fellow-members at this very important epoch in the existence of the Society. I think I am justified in calling the present conjuncture of affairs an epoch, because the Act of '68, which gave us great privileges, affixed as a condition thereto the performance of a certain duty, and this being the period when, by some means or other, regulations are to be commenced, I think may fairly be called an epoch. This brings me to the question, all important at this moment, how shall those regulations be made? Do not imagine, if you please, that the notion of a duty undertaken is my own merely; all members of Parliament with whom I have talked on the subject, whether they be favourable or adverse to the new Pharmacy Bill, agree in such an interpretation of the first section of the Act of '68.

"The facts of the case stand thus:—The Pharmaceutical Society declined at its last annual meeting to prescribe regulations, but set its seal of approval on certain methods of storing and dispensing poisons which had been most carefully set down by men knowing, on the one hand the dangers, on the other the difficulties, in the way of dispensers. The Privy Council, who are, in fact, concerned in carrying out the Act of '68, said, naturally enough, you have not done your duty, and we must either urge you to do it, or do it ourselves independently of you. Hence the origin of the Pharmacy Bill which passed the House of Lords a few weeks ago, and is now in progress in the Commons. I would not have you under any misapprehension respecting the delay which has arisen. When the bill came for second reading last Thursday, it was not postponed for any reason which concerns the bill itself, as you may see by the discussion which has been published in the *Pharmaceutical Journal*, but

merely because many members wished to protest against a growing infringement on the forms of the House, *i.e.*, reading bills which are to be extensively altered, without giving the House a previous opportunity of seeing what those amendments are.

"The bill originally proposed is short and simple. It gives to the Council of our Society the power to submit regulations, from time to time, to the Privy Council for approval, and, if need be, to amend or revoke such regulations. It then states that if no regulations are in force, the Privy Council may call on us to frame some; and if we fail to do that and obtain the approval of the Council thereto, that body may act without reference to us.

"When this bill was first brought to our notice, the Council discussed its merits and demerits, resolved to watch its progress and endeavour to improve it.

"I was deputed, with the President, to see the officials of the Privy Council; and on doing so, we were met freely and fairly by concessions at once. First it was proposed to take away all initiative power from the Privy Council, by embodying our own regulations in a schedule to the bill, and giving us authority to amend and revoke them from time to time, with approval of the Privy Council. Next it was agreed to add a clause which would compel all persons keeping open shop to observe the same regulations. Thus the two grievances were removed, and chemists would not be branded with what had been called the indignity of conforming to rules from which others were exempted. I thought we had thus succeeded admirably; but at a future meeting the Council, by a majority of one, decided still to oppose rather than amend, although generally admitting that the objections to the bill had been removed; and you have had circulars, asking you, as plainly as possible, to confirm them in this opposition. It is at this conjuncture that I ask you to exercise your free and independent judgment in the matter—not simply to continue your agitation if you disapprove, but if you approve, and think with me, that the bill, in its amended form (the poison bottle, let me remind you, has been struck out of the dispensing clause) will be the best settlement we can hope to get of the question, and that an early settlement will be conducive to the good of our Society, to signify to those who represent you in Parliament that these fair amendments being made, you no longer desire to obstruct its progress. In order that you may see exactly the scope of the amendments, I enclose herewith a copy of the original bill, side by side with a draft of that which will be submitted to the House on Monday next by Mr. Forster. We know the nature and extent of the regulations; we know that they are already adopted in very many establishments both in London and the country; that they are so elastic that almost any pet method of storing poisons which is not named in them would not be excluded by them; and, further, that at a very full meeting of our Society, a majority of nineteen only decided against making them at once compulsory. Beyond all this we know that it, owing to the late period of the session, the bill be shelved now, it will surely be reproduced at the very commencement of next session, when time will be in favour of the supporters rather than the opponents of the bill, and perhaps 'inspectors,' the necessity for whose appointment was so kindly suggested to Mr. Forster by the deputation a fortnight ago, may be provided for us.

"I could find many members of our Council—perhaps even a majority—to sign this letter with me, but as I am already a marked man for venturing to uphold what I believe to be the best interest both of the Society and the trade, in opposition to the last voting of my colleagues, I prefer standing alone in this communication, and I am sure you will believe me always

"Very faithfully yours,

"GEORGE W. SANDFORD.

"47, Piccadilly, London, July 10, 1871."

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

DEAR SIR,—Will you oblige me by inserting the enclosed circular in your next issue?

Yours truly,

ROBERT HAMPSON, Hon. Sec.*

63, Piccadilly, Manchester, July 11, 1871.

* We have received a similar circular for publication from Mr. Vizer.

"THE NEW PHARMACY BILL AND ITS AMENDMENTS.

"Address to Pharmacists and Chemists and Druggists."

"DEAR SIR,—The defeat of Mr. Forster's effort to read the Amended Pharmacy Act the second time last Thursday night, speaks volumes in favour of the action which has been taken in opposing this obnoxious bill. It has been observed by one fully conversant with the general routine of business in the House of Commons, that to find so many independent members remain till so late an hour, except on special occasions, is a most uncommon occurrence, and powerfully evinces the interest taken in the present subject. The thanks of the whole trade are due to these gentlemen for thus practically demonstrating to their constituencies that the numerous expressions of dissent to the Bill which had been received, were not disregarded, but that their interests were considered and watched by their representatives. Would that we could extend the compliment to all our representatives at Bloomsbury-square! We should not then find ourselves in the anomalous position of having to protect ourselves by combined action against those who ought to be our protectors.

"Having touched upon this subject, we cannot refrain from further expressing the feeling of regret which pervades the trade at seeing persons whose election our two Associations supported, on the distinct avowal of sympathy with our views, now systematically voting in opposition to those opinions.

"In consequence of the alterations proposed by Mr. Forster, and confidentially communicated to the Pharmaceutical Council for consideration, at the meeting held on Wednesday, the 5th, a lengthy and earnest discussion took place, resulting in the adoption of the following resolution:—'That this Council has carefully considered the amendments to the Pharmacy Bill, introduced by the Right Hon. W. E. Forster, and regrets that it is unable to accept them as removing its strong objections to the bill.' The members voting as a majority in favour of this resolution were—Messrs. Atherton, of Nottingham; Bottle, of Dover; Frazer, of Glasgow; Reynolds, of Leeds; Sutton, of Norwich; Woolley, of Manchester; Betty and Greenish, of London, showing most distinctly that if these gentlemen reflect the opinions of their constituencies, that all the large towns and centres of population continue firm in their opposition to the amended bill.

"Let us now for a moment consider the position in which these amendments place us.

"In the first place, all open shops are now included; does this satisfy us?—are we to be silenced by the fact that others will be drawn into the net in which we are threatened to be taken? Assuredly not! In all our personal interviews with members of Parliament we have been most careful, whilst exhibiting the anomaly of making laws applying to chemists, whilst others keeping open shops identical with our own were left unfettered, to assert our distinct objection to the principle of Government interference in such matters of practical detail, and also the absence of any desire on our part to inflict on others burdens and penalties to which we so strongly object for ourselves. If Mr. Forster's desire, however, is really the protection of the public, in order to be fully consistent therein, he must of necessity include not only surgeons with open shops, but hospitals, dispensaries, infirmaries, wholesale dealers, oil and colourmen, dry-salters, and every place where poisons are prepared, kept, or supplied in any way for public use, otherwise his Bill will be but partial in its operation and unjust in its principle.

"A second alteration is the removal of the power of initiating regulations from the hands of the Privy Council into the hands of the Pharmaceutical Council, the effect of which would be to deprive the Society, in its corporate capacity, of the power it now possesses of accepting or rejecting such additional regulations, and transferring the entire authority and power into the hands of the Pharmaceutical Council. To this we also distinctly object. Our voices have hitherto been raised against the assumption of that power by the Privy Council, on the ground that members of that body are of necessity ignorant of the essential practical details; we now, with equal distinctness, protest against the members of the Pharmaceutical Society being excluded from the power of expressing an opinion upon questions which vary so considerably in different localities, remembering that the

representative character of that Council (as regards locality may at any time, by circumstances over which we can have no control, be entirely destroyed, as illustrated only a few months since, when the seven Members of Council elected by 'drawing of lots' were every one provincial men, leaving London entirely unrepresented.

"The third alteration is also one of great importance, appealing to every one of us in accents unmistakable, viz.: the increase of penalty for omitting to carry out the prescribed regulations from Five to Ten Pounds for the second and subsequent offences against the law. Added to which, according to the 26th clause of the Act, 1868, the Privy Council may direct the name of any person convicted of any offence against this Act to be erased from the Register.

"This we consider a most arbitrary exercise of power, which in practice would be highly prejudicial to our interests, and add very materially and unnecessarily to our anxiety in conducting business.

"For the above reasons we feel satisfied you will feel it your duty, to use every possible effort to prevent the passing of the bill next Monday, the 17th inst.; to this end we would remind you that nothing carries more weight to the minds of your representatives in Parliament, than communications from their own constituents. We would venture, therefore, to press very earnestly upon you to write, without a day's delay, to your members, showing them that the alterations, instead of removing objections, simply extend the ground of our disapproval, and urging upon them to give the bill their unqualified opposition.

"We would further suggest that any surgeons keeping open shops in your neighbourhood, should at once be made aware of the alterations in the bill, by which they will be brought under the control of the Council of the Pharmaceutical Society.

"We are, sir, your obedient servants,

"ROBT. HAMPSON,

"Hon. Sec. to the Chemists' Defence Association, Manchester.

"EDWIN B. VIZER,

"Hon. Sec. to the Metropolitan Chemists' Defence Association."

THE PUBLIC SAFETY.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—I am rather surprised to find that yourselves and so many chemists are against Government interference with reference to the "Poison Regulations."

However inconvenient and unpleasant it may be to submit to those regulations, my belief is, the more we have of Government inspection the better it will be for the *bona fide* chemist, and that the tide of progress is gradually carrying us to the adoption of the Continental system of Government appointment and supervision, which, whilst it makes the numbers less, will place those left in a position to do without debasing the trade, by dealing in farthing dips and methylated tincture of rhubarb.

Yours respectfully,

A COUNTRY CHEMIST.

LAW AND POLICE.

A QUESTION OF RESPONSIBILITY.

A SINGULAR case came on for trial before Mr. Ellison, judge of the Sheffield County Court, on the 15th ult. Mr. T. Ingle, saw-sharpen, of Heeley, sued Mr. John Joseph Riding, chemist and druggist, Devonshire-street, for the sum of £50 damages, alleged to have been sustained through the improper administration of certain medicines, viz., a box of mercurial pills. Plaintiff stated that in consequence of taking this medicine he became seriously ill, salivation and other symptoms of the action of mercury setting in, the result being that he was prevented from following his employment for sixteen weeks. A jury had been empanelled to try the case, but his Honour decided that there was no case to go to them. His ground for this decision was, that the defendant could not be treated as a surgeon or qualified medical practitioner, who had failed to exercise that

reasonable degree of skill which the law required, being simply a seller of medicine, and not a person who professed to exercise skill in the cure of diseases. His Honour directed a nonsuit, but the solicitor who appeared for plaintiff preferred a nominal verdict for the defendant in order that he might appeal against the decision.

ACTION FOR ASSAULT.

At the Abergavenny County Court, on the 16th ult., Mr. T. F. Hunter, chemist and druggist, brought an action against Mr. E. Roberts, to recover the sum of £30, for assault and battery. On the 16th of April last plaintiff met defendant, and had some conversation with him about some property. Defendant became angry, and struck plaintiff on the head with a stick, the blow causing loss of blood. In consequence of the injuries received, plaintiff was unable for some time to attend to his duties, and had to employ an attendant occasionally. Defendant's account was that plaintiff came to him and abused him for having kept dogs in his (plaintiff's) mother-in-law's house. As the defendant could not get rid of him, he pushed plaintiff, who raised a stick at defendant. The blow was saved, and defendant struck plaintiff on the head. His Honour (Judge Herbert) gave judgment for plaintiff. Damages £3 and costs.

GOVERNMENT PROSECUTION OF A CHEMICAL WORKS.

The Government Inspector of Chemical Works, Mr. A. E. Fletcher, has recently entered a suit against a St. Helen's firm for an infringement of the Alkali Act, by allowing the escape of a too great quantity of muriatic acid. In consequence of the firm immediately paying the proscribed fine of £50, the case will not be publicly proceeded with. It may be mentioned that this is the fourth prosecution instituted, since the passing of the Act, and they have all been directed against the proprietors of works situate in the districts of St. Helen's and Widnes, Lancashire. For reasons which will be apparent to all the fines are promptly paid on the receipt of summons.

FALSE PRETENCES.—HOW HAIR OIL IS MANUFACTURED.

At the Bristol sessions, a hawker named Richard Chandler, was charged with obtaining money by false pretences. The mode which he adopted to swindle shopkeepers was a singular one, as the following case will show. One of the witnesses, a Mrs. Batt, stated that the prisoner called upon her, and asked her if she would purchase some hair oil. He said he was a traveller from Birmingham, and offered to let her have the oil at 10d. per bottle. She bought seven bottles from him, and sold some of it during the day, but it was returned to her as being unsatisfactory. The bottles were labelled "highly perfumed hair oil." A day or two afterwards, she was in the shop of Mr. Phelps, a chemist, when the prisoner came in, and asked for Irish moss and essence of lemon, from which she supposed he made his hair oil. Mr. Phelps examined the contents of the bottles, and found that they consisted of a decoction of Irish moss, coloured with sulphur. The prisoner was proved to have sold six bottles of the same stuff to Mrs. Lusty, at 9d. per bottle, and a police officer stated that he had made inquiries with respect to the prisoner's proceedings before his apprehension, and discovered he had sold at least fifty bottles of this "perfumed hair oil." The jury found him guilty, and he was sent to prison for four months, with hard labour.

CHEMISTS' DIFFERENCES.

The Judge of the Gloucester County Court, recently had before him a cross-action, wherein Mr. L. Williams, chemist, Stroud, claimed £30 3s. from Mr. R. D. Mitchell, of Berkeley; and Mr. Mitchell, on the other hand claimed £50 from Mr. Williams. It appeared from the evidence that Mr. Williams sold his business in Berkeley to Mr. Mitchell, and at that time no complaint arose from the transaction. Subsequently, Mr. Williams set up a shop in a new part of Gloucester, and afterwards sold that business to Mr. Mitchell for £200, and bought from the latter gentleman, a business he had in Stroud, the price being £400. Mr. Mitchell then sent assistants to manage the Gloucester business, but, finding that it did not work profitably, he abandoned it and refused to pay the whole rent due, and other necessary

expenses; whereupon, Mr. Williams brought the action for £30 3s., and the judge awarded him that amount. Mr. Mitchell's claim was also settled. He declared that he had been deceived as to the extent of the Gloucester business and its stock, notwithstanding that he himself had advertised that business as doing a trade of £200 or £300 a year. Ultimately the judge gave a verdict for Mr. Williams.



A LAW was published in Austria, and is still in force, which prohibits apothecaries from the manufacture of artificial mineral waters, and forbids to name any artificial product after any spring in imitation of which it may have been made.

Captain John Ericsson estimates the temperature of the sun at 4,060,000° Fahr. Iron, at a white heat, is about 3,000°.

THE PETROLEUM GRIEVANCE.—We refer our correspondent (T.A.W.) to another page, which treats of the new Petroleum Act. Should the latter escape the fate of many of its brethren, and become the law of the land, such a difficulty as that complained of could be referred to a Minister of State.

R.P., Glasgow.—We cannot answer our correspondent's inquiry better than by quoting a sentence from "An Act to amend the Pharmacy Act, 1868:"—"Nor shall the said clauses prevent any person who is a member of the Royal College of Veterinary Surgeons of Great Britain, or holds a certificate in veterinary surgery from the Highland and Agricultural Society of Scotland, from dispensing medicines for animals under his care."

THE PETROLEUM BILL.

THE Earl of Morley has just carried through the House of Lords an important measure, which, if it pass the lower House, as is most probable, will consolidate and very considerably improve the present not quite satisfactory legislation with regard to the storage and sale of petroleum. We have no space this month to publish the bill, nor is it needful to do so until it becomes an Act. But we may say, from a careful perusal of its clauses, that it is evidently based on the experience which the past three years has given, and that if passed it will more effectually protect the public, and at the same time spare the dealer from some unnecessary vexation. A petroleum licence will not be required for any that is kept either for private use or for sale, provided the following conditions are complied with:—(1.) That it is kept in separate glass, earthenware, or metal vessels, each of which contains not more than half a pint, and is securely stopped. (2.) That the aggregate amount kept, supposing the whole contents of the vessels to be in bulk, does not exceed three gallons. This will permit the sale of benzine collas, &c., without a licence. But (if our interpretation of the phraseology is correct) it will still be necessary that all such articles should be fully labelled, and that the words "dangerously inflammable," and the name and address of the vendor should be added. A succeeding section provides that a charge, not exceeding five shillings, may be made by the local authorities in respect of each licence granted. The tenth section provides against the too free exercise of arbitrary powers by the local authorities, and also promises an opportunity of appeal to those to whom licences are refused. It is thus worded:—

"If on any application for a licence under this Act the

local authorities refuse the licence, or grant the same only on conditions with which the applicant is dissatisfied, the local authority shall, if required by the applicant, deliver to him in writing under the hand or hands of one or more of the persons constituting the local authority, a certificate of the grounds on which they refused the licence or annexed conditions to the grant thereof.

"The applicant, within ten days from the time of the delivery of the certificate may transmit the same to a Secretary of State, if the application is for a licence in England or Scotland, and to the Lord Lieutenant if the application is for a licence in Ireland, together with a memorial, praying that, notwithstanding such refusal, the licence may be granted, or that the conditions may not be imposed, or may be altered or modified in such manner and to such extent as may be set forth in such memorial.

"It shall be lawful for the Secretary of State, or the Lord Lieutenant, if he think fit, on consideration of such memorial and certificate, and if he think it necessary or desirable, after due inquiry and a report by such person as he may appoint for that purpose, to grant the licence prayed for, either absolutely or with such conditions as he thinks fit, or to alter or modify the conditions imposed by the local authority; and the licence so granted, or altered and modified, as the case may be, when certified under the hand of a Secretary of State, or the Lord Lieutenant, shall be to all intents as valid as if granted by the local authority."

All trials of suspected petroleum are to be made by an authorised officer who *may* (it should be *shall*) give the dealer due notice, so that he may witness the experiment. The dealer may produce contrary evidence to that of the officer, in which case the Court may, if it think fit "appoint some person skilled in testing petroleum to examine the samples." The expenses of this proceeding are to be borne by the party against whom the decision shall be given.

We pause here merely to reiterate a suggestion which we made when the last Act was passed, that chemists would do well, in view of possible fees, to make themselves "skilled in testing petroleum."

The schedule which gives instructions respecting the manner of the testing is the most important alteration proposed by the bill. The words, "petroleum to which this Act applies," is to mean such as will give off inflammable vapour at a temperature of less than 85° Fahr. in a *closed vessel*. At present, petroleum is understood to be an oil (of the described character) which gives off an inflammable vapour at less than 100° in an open vessel.

The uncertainty and consequent unsatisfactoriness of the present system of testing petroleum could not be more perfectly illustrated than by noticing the frantic reports which some of the petroleum brokers published as soon as the provisions of the bill became known. In one instance it was said that the alteration was equivalent to raising the standard under the former system to 120°, a figure so high that no petroleum could reach it. It was confidently asserted that the passage of the bill would perfectly annihilate the import trade in this article; and reasoning *à posteriori*, it was also stated that the bill was the work of the Scotch members, whose object, of course, was to prevent the competition from which their native oil suffered. It is true that the market has exhibited much stagnation since the introduction of the bill, but that does not prove much. Nothing is so easily frightened as a "market," whether in petroleum, money, or any other commodity. The bill was drawn up by the Metropolitan Board of Works, and the alteration with regard to the test was made to correspond as exactly as possible with the former plan. The judgment of the officers of the board in this respect has been fully confirmed

by the best authorities we know of; and as to the annihilation of the trade, it will be sufficient to remember that identically the same prophecy was uttered when the last Petroleum Act was passed in 1868, since which date the British imports have increased by nearly 50 per cent.

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- Case of Dissecting Instruments, quite new, 14/. Some good works on Chemistry. Alfred Davis, 21, Kenton-street, London, W.C.
- One gal. Tin Still, with Jacket, and Liebig's Condenser, in perfect order. Price £1. Address, Thomas D. Walker, Dresden, Staffordshire.
- About 1 gross Price's Shanoodhole, for cleaning silk, &c. Retail 1/ each. Quite clean. Price 4/ doz. R. Hampson, 63, Piccadilly, Manchester.
- Eighteen forty ounce, twenty-five eight ounce blue jars, covers, white rims; twelve glass jujubo jars, covers and cut knobs. 35/407.
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- Two (3 to 4 gallon) copper steam-jacketed Pans, Boiler, and Connections. Cost £35. Never used. "The Pharmaceutical Journal," first and second series (complete), newly bound, half roan. Scott's Bible, 10 vols. Morocco (84 maps and plates). Fine presentation copy (to "Sir James Simpson.") Cost £10 10. Slugg's "Two Guinea Microscope." Goddard's "Price Book." Slater's "Manual of Colours." Plumbe's "Skin Diseases." Bateman's "Magnacopia." Fox's "Eczema." Cheap. Macpherson and Co., Stornoway.
- Squire's "Companion to B.P. 1869," 3/6; do. do. 1864, 2; Liebig's "Animal Chemistry," 3; Liebig's "Agricultural Chemistry," 3; Turner's "Chemistry," 5; Carpenter's "Physiology," 6; Gairdner "On Gout," 2; Neligan's "Medicines," 4/6; Gregory's "Medicine," 3/6; Burns's "Midwifery," 3/6; Henry's "Chemistry," 2 vols., 3; Thompson's "Dispensatory," 4/6; Beasley's Pocket Formular, 2/6; Beasley's Receipt Book, 2/6. Chas. J. H. Saunders, Chemist, Bromley, Kent.
- Roller Printing Press, Type, Composing Stick, Ink, and Accessories, 35/. Stereoscopic Camera and Lenses, 50/. Ure's "Dictionary of Chemistry," 10/. Muspratt's "Chemistry," 40/. Fownes' "Manual," 5; White's 4 vol "Farriery," 7/6; Cooper's "Surgical Dictionary," 10/; Elliotson's "Human Physiology," 10/; Bateman's "Skin Diseases," 2/6; Dublin "Dissector's Manual of Anatomy," 2/6; "British Pharmacopoeia," 2/6. Pair Show Globes, 30/. Electric Bell, 21/. Counter Scales, 3/6. Counter Gas Stove, 5/. Maw's Perfumery Stand, 3 Shelves, 3 feet long. Plate Glass Mirror Backs, handsome either for counter or window, 37/6. Y. Z., Stamp Office, Bourn.

2 cwt. Carbolic Soap, 10 per cent. acid; 6 lb. Cadmium Sulph., and 1 lb. each of Cadmium Iodide, Bismuth Chloride and Carbonate, Ammon. Iodide, Cobalt Chloride and Sulph. Zinc Bromide. 18/407.

Gray's "Supplement," 5/. Macleise's "Surgical Anatomy," 35 plates 22 by 15, 20/. Hunter "On the Blood," 3/. Faraday's "Chemical Manipulations," 7/6. Paris "Pharmacologia," 10/. John Forbes's "Diseases of the Chest," 3/. Gray's "Operative Chemist," 5/. Thomas's "Practice of Physic," 7/6. Duncan's "Dispensatory," 5/. Beal's "Urinary Deposits," 5/. Routh's "Infant Feeding," 2/6. Beck's "Medical Jurisprudence," 10/. Anatomist's "Vade Mecum," 2/6. Park's "Chemistry," 1/. May's "Physiology," 3/. Liebig's "Agricultural Chemistry," 4/6. Pharmacopœia 1836, Translation, 1/. Cullen's "Physic and Surgery," 2/6. (Or offers.) Two pair Counter Scales. Cj. Tincture Press. Jeffrey's Inhaler. Small Coil Machine. Copper Spirit Measures. Three Small Bell-metal Mortars. 28" Rad. Pyrethri. W. Duncombe, Wincanton.

WANTED.

A second-hand "British Pharmacopœia," 1868 edit. Price. W. Taylor, Warsop, Mansfield.

Tuft's "Operative Dentistry," Tome's "Dental Surgery," Harris's "Dental Surgery." 13/407.

Two Iron Oil Cisterns, to hold 80 or 100 gallons each. Suitable for Benzoline. T. March, Long Buckby.

Apparatus of every description purchased by W. Faulkner, electrician, 40, Endell-street, London.

A Pamphlet or Journal containing "Pharmaceutical Ethics," by Mr. Inc. Tyndall's "Heat, a Mode of Motion," State lowest prices. Halstead, Chemist, Rawtenstall.

An Upright Showcase for Counter, about 24 in. wide by 36 in. high. Must be in good condition. W. A. Wood, Hunslet.

Hooper's "Medical Dictionary and Physician's Vade Mecum." A large Wedgewood Mortar and Pestle. Also a job lot of Trusses. J. Marlar, Halstead.

Iron or Tin Cisterns for Storing Spirit. State price and size, and where to be seen. Address, T. A. Wedge, Victoria street, Wolverhampton.

Twenty-four 4 lb. Ointment Jars, Fig. 1, Maw's Catalogue. Must be all perfect (if chipped, will not do). Address, T. M. H., 5, Bridge-street, Warrington.



[The following list has been compiled expressly for the CHEMIST AND DRUGGIST, by L. de Fontainemoreau, Patent Agent, 4, South-street, Finsbury, London; 10, Rue de la Fidélité, Paris; and 33, Rue des Minimes, Brussels.]

Provisional Protection for six months has been granted for the following:—

987. C. Morfit, of Baltimore, U.S. Improvements in the manufacture of phosphates of lime, and in apparatus employed therein. Dated 14th April, 1871.
1149. A. S. Stucker, of Herleydown. Improvements appertaining to bottles and stoppers, and articles to be employed therewith, and in the construction, manufacture, and combination thereof. Dated 29th April, 1871.
1179. T. Schwartz, of New York. Improvements in the method of treating wood for the production of acetic acid, and the utilization of the by-products. Dated 2nd May, 1871.
1211. A. P. Vassart, of New Cross, Kent. Improvements in treating liquid sewage and other ammoniacal liquors in order to obtain manure therefrom. Dated 4th May, 1871.
1215. E. H. Prentice, of Stowmarket, Suffolk. Improvements in the manufacture of phosphatic manures. Dated 5th May, 1871.

1235. J. Duncan, of Mining-lane, and J. Stenhouse, of Pentoavillo. Improvements in the manufacture of sugar, and in the treatment of saccharine solutions. Dated 6th May, 1871.
1243. H. Chance, of Oldbury, Worcester. Improvements in retorts or apparatus for concentrating sulphuric acid and for other like purposes. Dated 8th May, 1871.
1299. W. H. Balmain, of St. Helen's, Lancaster. Improvements in the preparation of soda and its various salts in a high degree of purity. Dated 13th May, 1871.
1305. E. Königs, of Westhofen, Westphalia. Improvements in treating pyrites, and in obtaining sulphate of soda and chlorine. Dated 15th May, 1871.
1211. W. J. Menzies, of St. Helen's, Lancaster. Improvements in the treatment of phosphates and other solid fertilizers for the purpose of rendering the same more applicable to the manufacture of manures. Dated 15th May, 1871.
1361. W. E. Newton, of London. Improvements in electro-magnetic engines. Dated 20th May, 1871.
1363. P. Rumine, of St. Petersburg. A new or improved process of producing ozone. Dated 20th May, 1871.
1365. W. R. Lake, of London. An improved process and apparatus for manufacturing nitro-glycerine. Dated 20th May, 1871.
1374. A. M. Clark, of London. Improvements in the preparation of colours from metallic oxides. Dated 22nd May, 1871.
1385. J. Glover, of Wallsend, near Newcastle-on-Tyne, and A. Goodman, of Walker, near Newcastle-on-Tyne. Improvements in apparatus to be employed in the manufacture of bleaching powder. Dated 23rd May, 1871.
1396. A. M. Clark, of London. Improvements in strainers or envelopes used in extracting liquids from various substances. Dated 24th May, 1871.
1420. C. Morfit, of Baltimore, U.S. Improvements in the treatment of crude and mineral phosphates of lime for their conversion into potential fertilizing products, and in the recovery of a material employed therein. Dated 27th May, 1871.
1453. T. Sweeney, of Boston, U.S. An improved machine for measuring and registering a flowing liquid called a fluid meter. Dated 31st May, 1871.
1460. J. L. Pulvermacher, of Regent-street. Improvements in the construction of electric, galvanic, and magnetic chains, hands, and garments, and in means of applying such to the human body for treating diseases and complaints, and for other purposes; also in fasteners and electro-conductors in connection with such chains and hands. Dated 1st June, 1871.
1519. W. R. Lake, of London. Improvements in pads for rupture trusses. Dated 8th June, 1871.

Letters Patent have been issued for the following:—

3190. P. Kagenhusch, of Lambeth. Improvements in the means of extracting or separating metals from their silicates. Dated 5th December, 1870.
3250. J. C. Mowburn, of London. Treating lichens or moss in order to obtain sugar or saccharine matter and spirit therefrom. Dated 12th December, 1870.
3261. J. J. Coleman, of Glasgow. Improvements in treating certain mineral lubricating oils and paraffine. Dated 13th December, 1870.
3307. G. E. Marchisio, of Baker-street, Portman-square, and H. B. Price, and J. E. Hodgkin, both of Liverpool. Improvements in the process of extracting oil from olives or olive cakes, and in machinery to be employed therefor. Dated 19th December, 1870.
3308. D. G. Fitz-Gerald, of Lavender-hill, Surrey. Portable sustaining voltaic batteries. Dated 19th December, 1870.
3310. N. M. Henderson, of Mid-Calder, Midlothian, N.B. Improvements in apparatus for cooling paraffin solutions or other solidifiable or partially solidifiable liquids. Dated 19th December, 1870.
3349. W. Spence, of London. Improvements in bedsteads for invalids. Dated 22nd December, 1870.
23. H. Larkin, of Theydon Gernou, Essex, and W. White, of Hampstead. Improvements in the manufacture of sodium and potassium, and in apparatus employed therein. Dated 5th January, 1871.
33. E. T. Hughes, of London. Improvements in plumbago presses. Dated 6th January, 1871.
237. G. H. Fauck, of Fenchurch-street. Improvements in apparatus applicable to vessels for containing volatile oils and spirits and other liquids. Dated 30th January, 1871.
289. A. V. Newton, of London. Improved machinery for manufacturing lozenges. Dated 2nd February, 1871.
691. H. Deacon, of Appleton House, Widnes, Lancaster. Improvements in the manufacture of bleaching powder, and of sulphate of soda, and of sulphate of potash, and in apparatus to be employed therein. Dated 15th March, 1871.
753. H. Deacon, of Appleton House, Widnes, Lancaster. Improvements in the manufacture of sulphuric acid, and in apparatus to be employed therein. Dated 20th March, 1871.
778. J. Dewar, of Kirkealdy, Fife, N.B. Improvements in the treatment of certain vegetable substances for manufacturing purposes, and for the production of food for man and animals. Dated 22nd March, 1871.
858. J. Fordred, of Blackheath. An improved mode of, and apparatus for, refining paraffin and spermaceti. Dated 30th March, 1871.
904. F. Claudet, of Coleman-street. Improvements in treating solutions obtained from burnt cuprous pyrites. Dated 5th April, 1871.
956. B. J. B. Mills, of London. Improvements in the preparation of juices of meat or other articles of food or remedial agent. Dated 11th April, 1871.
1025. W. R. Lake, of London. An improved plate or base for artificial teeth. Dated 18th April, 1871.
1044. B. J. B. Mills, of London. Improvements in methods and apparatus for removing oil from vegetable and other matter, and separating and recovering chemicals employed therefor, and in the manufacture of flour, beer, and other products of the material treated. Dated 20th April, 1871.

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Squire's "Companion to B.P., 1869," 3/6; do. do., 1864, 2/; Liebig's "Animal Chemistry," 3/; Liebig's "Agricultural Chemistry," 3/; Turner's "Chemistry," 5/; Carpenter's "Physiology," 6/; Gairdner "On Gout," 2/; Neligan's "Medicines," 4/6; Gregory's "Medicine," 3/6; Burns's "Midwifery," 3/6; Henry's "Chemistry," 2 vols., 3/; Thompson's "Dispensatory," 4/6; Beasley's Pocket Formular, 2/6; Beasley's Receipt Book, 2/6. Chas. J. H. Saunders, Chemist, Bromley, Kent.

Roller Printing Press, Type, Composing Stick, Ink, and Accessories, 35/. Stereoscopic Camera and Lenses, 50/. Ure's "Dictionary of Chemistry," 10/. Muspratt's "Chemistry," 40/. Fownes' "Manual," 5/; White's 4 vol "Farricry," 7/6; Cooper's "Surgical Dictionary," 10/; Elliotson's "Human Physiology," 10/; Bateman's "Skin Diseases," 2/6; Dublin "Dissector's Manual of Anatomy," 2/6; "British Pharmacopœia," 2/6. Pair Show Globes, 30/. Electric Bell, 21/. Counter Scales, 3/6. Counter Gas Stove, 5/. Maw's Perfumery Stand, 3 Shelves, 3 feet long, Plate Glass Mirror Backs, handsome either for counter or window, 37/6. Y. Z., Stamp Office, Bourn.

2 cwt. Carbolic Soap, 10 per cent. acid; 6 lb. Cadmium Sulph., and 1 lb. each of Cadmium Iodide, Bismuth Chloride and Carbonate, Ammon. Iodide, Cobalt Chloride and Sulph. Zinc Bromide. 18/407.

Gray's "Supplement," 5/. MacLise's "Surgical Anatomy," 35 plates 22 by 15, 20/. Hunter "On the Blood," 3/. Faraday's "Chemical Manipulations," 7/6. Paris "Pharmacologia," 10/. John Forbes's "Diseases of the Chest," 3/. Gray's "Operative Chemist," 5/. Thomas's "Practice of Physic," 7/6. Duncan's "Dispensatory," 5/. Beal's "Urinary Deposits," 5/. Routh's "Infant Feeding," 2/6. Beek's "Medical Jurisprudence," 10/. Anatomist's "Vade Mecum," 2/6. Park's "Chemistry," 1/. May's "Physiology," 3/. Liebig's "Agricultural Chemistry," 4/6. Pharmacopœia 1836, Translation, 1/. Cullen's "Physic and Surgery," 2/6. (Or offers.) Two pair Counter Scales. Cj. Tincture Press. Jeffrey's Inhaler. Small Coil Machine. Copper Spirit Measures. Three Small Bell-metal Mortars. 28" Rad. Pyrethri. W. Duncombe, Wincanton.

WANTED.

A second-hand "British Pharmacopœia," 1868 edit. Price. W. Taylor, Warsop, Mansfield.

Taft's "Operative Dentistry," Tome's "Dental Surgery," Harris's "Dental Surgery." 13/407.

Two Iron Oil Cisterns, to hold 80 or 100 gallons each. Suitable for Benzoline. T. March, Long Buckby.

Apparatus of every description purchased by W. Faulkner, electrician, 40, Endell-street, London.

A Pamphlet or Journal containing "Pharmaceutical Ethics," by Mr. Inc. Tyndall's "Heat, a Mode of Motion." State lowest prices. Halstead, Chemist, Rawtenstall.

An Upright Showcase for Counter, about 24 in. wide by 36 in. high. Must be in good condition. W. A. Wood, Hunslet.

Hooper's "Medical Dictionary and Physician's Vade Mecum." A large Wedgewood Mortar and Pestle. Also a job lot of Trusses. J. Marlur, Halstead.

Iron or Tin Cisterns for Storing Spirit. State price and size, and where to be seen. Address, T. A. Wedge, Victoria street, Wolverhampton.

Twenty-four 4 lb. Ointment Jars, Fig. 1, Maw's Catalogue. Must be all perfect (if chipped, will not do). Address, T. M. H., 5, Bridge-street, Warrington.



[The following list has been compiled expressly for the CHEMIST AND DRUGGIST, by L. de Fontainemoreau, Patent Agent, 4, South-street, Finsbury, London; 10, Rue de la Fidélité, Paris; and 33, Rue des Minimes, Brussels.]

Provisional Protection for six months has been granted for the following:—

987. C. Morfit, of Baltimore, U.S. Improvements in the manufacture of phosphates of lime, and in apparatus employed therein. Dated 13th April, 1871.
1149. A. S. Stacker, of Horsleydown. Improvements appertaining to bottles and stoppers, and articles to be employed therewith, and in the construction, manufacture, and combination thereof. Dated 29th April, 1871.
1179. T. Schwartz, of New York. Improvements in the method of treating wood for the production of acetic acid, and the utilization of the by-products. Dated 2nd May, 1871.
1211. A. P. Vassard, of New Cross, Kent. Improvements in treating liquid sewage and other ammoniacal liquors in order to obtain manure therefrom. Dated 4th May, 1871.
1215. E. H. Prentice, of Stowmarket, Suffolk. Improvements in the manufacture of phosphatic manures. Dated 5th May, 1871.

1235. J. Duncan, of Mineing-lane, and J. Stenhouse, of Pentonville. Improvements in the manufacture of sugar, and in the treatment of saccharine solutions. Dated 6th May, 1871.
1243. H. Chance, of Oldbury, Worcester. Improvements in retorts or apparatus for concentrating sulphuric acid and for other like purposes. Dated 8th May, 1871.
1299. W. H. Balmain, of St. Helen's, Lancaster. Improvements in the preparation of soda and its various salts in a high degree of purity. Dated 13th May, 1871.
1305. E. Königs, of Westhofen, Westphalia. Improvements in treating pyrites, and in obtaining sulphate of soda and chlorine. Dated 15th May, 1871.
1311. W. J. Menzies, of St. Helen's, Lancaster. Improvements in the treatment of phosphates and other solid fertilizers for the purpose of rendering the same more applicable to the manufacture of manures. Dated 15th May, 1871.
1361. W. E. Newton, of London. Improvements in electro-magnetic engines. Dated 20th May, 1871.
1363. P. Rühmke, of St. Petersburg. A new or improved process of producing ozone. Dated 20th May, 1871.
1365. W. R. Lake, of London. An improved process and apparatus for manufacturing nitro-glycerine. Dated 20th May, 1871.
1374. A. M. Clark, of London. Improvements in the preparation of colours from metallic oxides. Dated 22nd May, 1871.
1385. J. Glover, of Wallsend, near Newcastle-on-Tyne, and A. Goodman, of Walker, near Newcastle-on-Tyne. Improvements in apparatus to be employed in the manufacture of bleaching powder. Dated 23rd May, 1871.
1396. A. M. Clark, of London. Improvements in strainers or envelopes used in extracting liquids from various substances. Dated 24th May, 1871.
1420. C. Morfit, of Baltimore, U.S. Improvements in the treatment of crude and mineral phosphates of lime for their conversion into potential fertilizing products, and in the recovery of a material employed therein. Dated 27th May, 1871.
1453. T. Sweeney, of Boston, U.S. An improved machine for measuring and registering a flowing liquid called a fluid meter. Dated 31st May, 1871.
1460. J. L. Pulvermacher, of Regent-street. Improvements in the construction of electric, galvanic, and magnetic chains, bands, and garments, and in means of applying such to the human body for treating diseases and complaints, and for other purposes; also in fasteners and electro-conductors in connection with such chains and bands. Dated 1st June, 1871.
1519. W. R. Lake, of London. Improvements in pads for rupture trusses. Dated 8th June, 1871.

Letters Patent have been issued for the following:—

3190. P. Kagenbuseh, of Lambeth. Improvements in the means of extracting or separating metals from their silicates. Dated 5th December, 1870.
3250. J. C. Mewburn, of London. Treating lichens or moss in order to obtain sugar or saccharine matter and spirit therefrom. Dated 12th December, 1870.
3261. J. J. Coleman, of Glasgow. Improvements in treating certain mineral lubricating oils and paraffine. Dated 13th December, 1870.
3307. G. E. Marchisio, of Baker-street, Portman-square, and H. B. Price, and J. E. Hodgkin, both of Liverpool. Improvements in the process of extracting oil from olives or olive cakes, and in machinery to be employed therefor. Dated 19th December, 1870.
3308. D. G. Fitz-Gerald, of Lavender-hill, Surrey. Portable sustaining voltaic batteries. Dated 19th December, 1870.
3310. N. M. Henderson, of Mid-Calder, Midlothian, N.B. Improvements in apparatus for cooling paraffin solutions or other solidifiable or partially solidifiable liquids. Dated 19th December, 1870.
3349. W. Spence, of London. Improvements in bedsteads for invalids. Dated 22nd December, 1870.
23. H. Larkin, of Theydon Gernon, Essex, and W. White, of Hampstead. Improvements in the manufacture of sodium and potassium, and in apparatus employed therein. Dated 5th January, 1871.
33. E. T. Hughes, of London. Improvements in plumbago presses. Dated 6th January, 1871.
237. G. H. Funck, of Fenchurch-street. Improvements in apparatus applicable to vessels for containing volatile oils and spirits and other liquids. Dated 30th January, 1871.
289. A. V. Newton, of London. Improved machinery for manufacturing lozenges. Dated 2nd February, 1871.
691. H. Deacon, of Appleton House, Widnes, Lancaster. Improvements in the manufacture of bleaching powder, and of sulphate of soda, and of sulphate of potash, and in apparatus to be employed therein. Dated 15th March, 1871.
753. H. Deacon, of Appleton House, Widnes, Lancaster. Improvements in the manufacture of sulphuric acid, and in apparatus to be employed therein. Dated 20th March, 1871.
778. J. Dewar, of Kirkealdy, Fife, N.B. Improvements in the treatment of certain vegetable substances for manufacturing purposes, and for the production of food for man and animals. Dated 22nd March, 1871.
858. J. Fordred, of Blackheath. An improved mode of, and apparatus for, refining paraffin and spermaceti. Dated 30th March, 1871.
904. F. Claudet, of Coleman-street. Improvements in treating solutions obtained from burnt cuprous pyrites. Dated 5th April, 1871.
956. B. J. B. Mills, of London. Improvements in the preparation of juices of meat or other articles of food or remedial agent. Dated 11th April, 1871.
1025. W. R. Lake, of London. An improved plate or base for artificial teeth. Dated 18th April, 1871.
1044. B. J. B. Mills, of London. Improvements in methods and apparatus for removing oil from vegetable and other matter, and separating and recovering chemicals employed therefor, and in the manufacture of flour, beer, and other products of the material treated. Dated 20th April, 1871.

Specifications published during the month. Postage 1d. each extra :—
1870.

2679. N. Domaillo and another. Stoppers for bottles. 10d.
2728. G. Batty. Concentrated food. 4d.
2751. W. E. Gedgo. Combined bung and vent-peg. 8d.
2774. C. H. Moberly. Evaporating apparatus. 10d.
2782. W. E. Newton. Manufacture of salt. 2s. 6d.
2784. W. Fletcher. Apparatus for measuring liquids. 10d.
2804. C. and T. C. Watts. Treating resinous gums. 1s. 4d.
2823. P. Spence. Manufacture of sulphuric acid. 8d.
2824. J. H. Anderson. Soap. 1s.
2832. W. F. Sweetland. Purifying sawage. 4d.
2866. J. H. Johnson. Manufacture of acids and alkaline salts. 4d.
2875. A. C. and J. Sterry. Purifying hydrocarbon and resin oils. 4d.
2943. W. E. Newton. Extract of hops. 4d.
2969. E. Herring. Alkalized glass. 4d.



THE chief financial feature of the past month has been the extraordinary success of the French Loan. Our manufacturers and merchants might well look with hopefulness to extended commercial relations with that country now that we have had such evident proof of the almost inexhaustible riches of its people. We note, as usual, the most recent characteristics of our markets.

ALOES.—The market has been well stocked with East Indian, and a steady business has been done. Socotrine scarce, and high prices obtained. Of Barbados, inferior qualities have been offered, mostly in boxes and tins, the supply of gourds in the West Indies having fallen short last season. Good liver Barbados, rather dark, have been placed at £7 5s.; rather coarse to good fair £3 17s. 6d. to £6 10s. Socotrine good fair at £11, inferior to middling, 35s. to £5, low, 18s.

BALSAMS.—Copaiba has been in good demand, and prices are sustained. Of 21 casks Maranham, 5 casks cloudy to rather cloudy, went to the bids of 1s. 9d. to 1s. 10d.; the remainder, cloudy to bright, bought in at 1s. 10d. to 1s. 11d. Peru—Former high prices maintained. Tolu is rather easier.

CAMPOR still has an upward tendency, and business has been restricted, buyers evidently not believing in the *brut* *fide* state of the market. There is a large stock of rough Camphor on hand, and the reason refiners give for the advance is, that the shipping demands are so heavy as almost to swamp them. Small sales of China have been effected at 72s. 6d.

CARDAMOMS are now commanding more attention, and a recovery is anticipated.

CASSIA LIGNEA.—The lots on sale have been in a few hands, and this accounts for the slightly higher prices obtained.

CANTHARIDES continue scarce and dear, although slightly lower prices have been accepted since we last wrote.

CASTOR OIL is dull of sale, the export requirements being small.

ESSENTIAL OILS have experienced but few changes. Superior Lemon is scarce and sold at higher prices, Cinnamon is also dearer, and Citronella flatter, with good supply on hand.

The **OPIMUM** market is tolerably firm, holders not giving way, although we learn that the present crop will be the largest on record. It is estimated that the yield will be two-fifths larger than the best crop yet produced. This fact is accounted for by the increased acreage under cultivation, and the very favourable weather for the growth of the poppy plant, throughout the season. Circumstances may affect its value, however, such as heavy rains during the "harvest," but according to present appearances, we may, anticipate a splendid yield, and a considerable fall in price, at no very distant time.

Reports from the Banda Islands are disquieting. In these

islands nutmegs and mace are cultivated to a very large extent. They annually export of the former about 400,000 lbs., and of the latter 130,000 lbs.; and recent advices say that a severe hurricane has destroyed nearly the entire crop of these spices. Hence the market is unsettled, and further advices will be anxiously looked for.

PEPPER.—There has been a good demand, and brisk business done; prices show a further advance of quite $\frac{1}{2}$ d. per lb. About 6,000 bags Singapore have been sold on the spot at $5\frac{1}{2}$ d. to $5\frac{3}{4}$ d., closing at the latter price. Penang at $5\frac{1}{2}$ d. to $5\frac{3}{4}$ d. cash.

CLOVES.—One case Penang sold at 1s. $4\frac{1}{2}$ d. Pimento has gone off at an advance of $\frac{1}{2}$ d. per lb. 1,835 bags sold at, for middling, $1\frac{1}{2}$ d. to 2d.; good, 2d. to $2\frac{1}{2}$ d.

For **GINGER** a good demand still prevails, and at auction both Jamaica and Cochin brought full rates.

GUMS have latterly attracted more attention, and Benjamin and Gamboge have a healthy appearance. Of the former 35 cases rather grey to good fair seconds have been taken, at 8l. 2s. 6d. to 8l. 15s., and 15 cases brown almondy thirds, at 80s. to 85s. Of Gamboge 39 cases were offered, and 24 sold; fair bright pipe, partly run, at 14l., one lot at 14l. 2s. 6d.; good middling, damaged, 11l. 15s. to 11l. 17s. 6d.

CHEMICALS.—The market has been steady for most articles, and the decline of others is attributable to manufacturers not being extensively booked for forward orders. On the whole, however, much buoyancy is evident. Although complaints of dull markets reach us from the United States, shipments thither continue very considerable. At home a brisk inquiry continues for Caustic Soda and Soda Ash, but Soda Crystals and Bicarbonate are slightly duller. Muriate of Potash keeps up a temporary activity, the demand being chiefly for export at £9 to £9 2s. 6d. f.o.b. A fall may be looked for in this article, as home consumers are well supplied forward. Sulphate of Ammonia continues in good request at a high price. Free sales to France have arrested the further decline of Nitrate of Soda, but exporters have no confidence in the artificial firmness thus produced. Borax is still dear, and Chlorate of Potash has also much advanced, an active demand making it difficult for manufacturers to deliver. Cream of Tartar commands attention at firm rates. The continued advance in the price of Iodine is sustained; Iodide of Potassium, of course, experiencing a similar elevation. Bleaching Powder has been in great demand, and prices, which were easier, have again moved up. In Newcastle 13s. 6d. to 14s. has been wanted, and in London 14s., and these are nominal quotations, sellers being few and far between. Quicksilver is easier, and quotations show a fall of 10s. per bottle, with additional discount. Antimony has also receded in price.

DRY-SALTERIES have not varied much during the past month. Shellac still continues in good odour, and commands firm rates. Turmeric is also looked after, and floatingsales of Bengal are readily effected. Logwood is dull of sale. Safflower will probably drop shortly. Advices from Calcutta report the market abnormally quiet, in consequence of small arrivals, and a general belief that the up-country dealers will not be able to hold on much longer.

OILS.—Linseed has been in more demand, and the market has assumed a firmer tone; the present value is about £33, no forward sales being reported. Rape still remains dull, and the market easier; English brown £42 5s. to £42 10s. on the spot. Crude Cotton is still wanted, and has an upward tendency, £28 5s. has been paid; and refined is worth £32 10s. to £33 10s. Olive still remains rather neglected. Coconut has moved off slowly; fine Cochin is still scarce, and is worth £50 10s. Ceylon has been offered on the spot at £39 10s. to £40, and for arrival at £40, sellers wanting to go on. Although the market for Palm has been steady, but little activity is reported: fine Lagos has gone off slowly at £37 to £37 10s. A limited quantity of Sperm fetched £81 10s., and some second quality Whale £33. Cod remains quiet at £35 to £35 10s. Turpentine, in the absence of arrivals, continues to advance in price, and consumers hold off as much as possible, only taking sufficient for immediate wants. American is now worth 41s. 6d., and French 41s. Petroleum has been very flat during the month, in consequence of the fear which the new Petroleum Bill has occasioned. As there is really no ground for any alarm, however, the present flatness cannot be expected to last long.

Monthly Price Current.

[The prices quoted in the following list are those actually obtained in Mining-lane for articles sold in bulk. Our Retail Subscribers must not expect to purchase at these market prices, but they may draw from them useful conclusions respecting the prices at which articles are offered by the Wholesale Firms.]

CHEMICALS.

| | 1871. | | 1870. | |
|---|-------|--------|-------|--------|
| | s. d. | s. d. | s. d. | s. d. |
| ACIDS— | | | | |
| Acetic per lb. | 0 4 | to 0 0 | 0 4 | to 0 0 |
| Citric per lb. | 2 10½ | 2 10½ | 2 5½ | 2 6 |
| Hydrochlor. per cwt | 4 0 | 7 0 | 4 0 | 7 0 |
| Nitric per lb. | 0 5 | 0 5½ | 0 5 | 0 5½ |
| Oxalic " | 0 10 | 0 0 | 0 8 | 0 9 |
| Sulphuric " | 0 0½ | 0 1 | 0 0½ | 0 1 |
| Tartaric crystal .. " | 1 3½ | 0 0 | 1 3½ | 1 3½ |
| powdered .. " | 1 3½ | 0 0 | 1 3½ | 0 0 |
| ANTIMONY ore..... per ton | 240 0 | 260 0 | 340 0 | 400 0 |
| crude .. per cwt | 36 0 | 38 0 | 40 0 | 0 0 |
| regulus.. " | 46 0 | 47 0 | 74 0 | 75 0 |
| star " | 48 0 | 49 0 | 75 0 | 0 0 |
| ARSENIC, lump..... " | 15 6 | 16 0 | 16 0 | 16 6 |
| powder.... " | 6 9 | 7 3 | 7 3 | 7 6 |
| BRIMSTONE, rough .. per ton | 160 0 | 0 0 | 160 0 | 0 0 |
| roll per cwt | 10 0 | 10 3 | 11 0 | 0 0 |
| flour..... " | 12 0 | 13 0 | 12 0 | 13 0 |
| IODINE, dry per oz. | 1 3 | 1 4 | 0 9 | 0 9½ |
| IVORY BLACK, dry.. per cwt. | 0 0 | 0 0 | 0 0 | 0 0 |
| MAGNESIA, calcined.. per lb. | 1 2 | 0 0 | 1 2 | 0 0 |
| MERCURY..... per bottle | 190 0 | 0 0 | 157 0 | 0 0 |
| MINIUM, red per cwt. | 20 6 | 21 0 | 20 0 | 21 0 |
| orange " | 31 6 | 32 0 | 31 6 | 32 6 |
| PRECIPITATE, red .. per lb. | 3 2 | 0 0 | 2 9 | 0 0 |
| white .. " | 3 4 | 0 0 | 2 8 | 0 0 |
| PRUSSIAN BLUE .. " | 0 0 | 0 0 | 0 0 | 0 0 |
| SALTS— | | | | |
| Alum per ton | 135 0 | 140 0 | 140 0 | 155 0 |
| powder " | 145 0 | 150 0 | 160 0 | 165 0 |
| Ammonia: | | | | |
| Carbonate per lb. | 0 6½ | 0 0½ | 0 5½ | 0 6 |
| Hydrochlorate, crude, white..... per ton | 460 0 | 560 0 | 480 0 | 560 0 |
| British (see Sal Ammoniac) | | | | |
| Sulphate per ton | 390 0 | 400 0 | 325 0 | 330 0 |
| Argol, Cape per cwt | 45 0 | 79 0 | 50 0 | 67 6 |
| France " | 0 0 | 0 0 | 40 0 | 50 0 |
| Oporto, red .. " | 22 0 | 24 0 | 22 0 | 24 0 |
| Sicily " | 0 0 | 0 0 | 32 0 | 40 0 |
| Naples, white, " | 0 0 | 0 0 | 0 0 | 0 0 |
| Florence, white, " | 0 0 | 0 0 | 0 0 | 0 0 |
| " red .. " | 0 0 | 0 0 | 0 0 | 0 0 |
| Ashes (see Potash and Soda) | | | | |
| Bleaching pow l. per cwt. | 12 6 | 14 0 | 8 6 | 9 0 |
| Borax, crude " | 25 0 | 40 0 | 25 0 | 35 0 |
| (Tincal) .. " | 45 0 | 80 0 | 45 0 | 60 0 |
| British refnd. " | 75 0 | 80 0 | 68 0 | 70 0 |
| Calomel per lb. | 3 0 | 0 0 | 2 8 | 0 0 |
| Copper: | | | | |
| Sulphate per cwt. | 23 6 | 25 0 | 23 6 | 24 0 |
| Copperas, green .. per ton | 50 0 | 60 0 | 50 0 | 60 0 |
| Corrosive Sublimate.. p. lb. | 2 4 | 0 0 | 2 1 | 0 0 |
| Cr. Tartar, French, p. cwt. | 92 6 | 95 0 | 88 0 | 90 0 |
| Venetian grey .. " | 95 0 | 0 0 | 90 0 | 96 0 |
| brown .. " | 75 0 | 85 0 | 0 0 | 0 0 |
| Epsom Salts per cwt. | 6 0 | 7 0 | 6 0 | 7 0 |
| Glauber Salts " | 4 6 | 6 0 | 4 6 | 6 0 |
| Lime: | | | | |
| Acetate, white, per cwt. | 12 0 | 23 0 | 12 6 | 23 0 |
| Magnesia: Carbonate .. " | 42 6 | 0 0 | 42 6 | 0 0 |
| Potash: | | | | |
| Bichromate per lb. | 0 9 | 0 0 | 0 5 | 0 5½ |
| Carbonate: | | | | |
| Potashes, Canada, 1st sort per cwt. | 33 0 | 33 3 | 31 0 | 0 0 |
| Pearlashes, Canada, 1st sort per cwt. | 44 0 | 0 0 | 45 6 | 0 0 |
| Chlorate per lb. | 1 6 | 0 0 | 0 10 | 0 0 |
| Prussiate per lb. | 1 5 | 1 6 | 1 0 | 0 0 |
| red .. " | 2 2½ | 2 5 | 1 9½ | 1 10 |
| Tartrate (see Argol and Cream of Tartar) | | | | |
| Potassium: | | | | |
| Chloride per cwt. | 11 0 | 12 0 | 9 6 | 0 0 |
| Iodide per lb. | 16 0 | 17 0 | 12 0 | 0 0 |
| Quinine: | | | | |
| Sulphate, British, in bottles per oz. | 7 2 | 0 0 | 5 10 | 0 0 |
| Sulphate, French .. " | 6 10 | 0 0 | 5 5 | 5 6 |
| Sal Acetos per lb. | 1 0½ | 0 0 | 0 10 | 0 0 |
| Sal Ammoniac, Brit. cwt. | 41 0 | 42 0 | 41 0 | 42 0 |
| Saltpetre: | | | | |
| Bengal, 6 per cent or under per cwt. | 27 3 | 28 6 | 23 0 | 24 9 |
| Bengal, over 6 per cent. per cwt. | 26 0 | 27 0 | 22 6 | 23 6 |
| Madras..... " | 0 0 | 0 0 | 0 0 | 0 0 |
| Bomb. & Kurrachee p. ct. | 0 0 | 0 0 | 0 0 | 0 0 |
| European..... " | 0 0 | 0 0 | 25 0 | 26 0 |
| British, refined .. " | 30 6 | 31 6 | 27 0 | 27 6 |
| Soda: Bicarbonate, p. cwt. | 12 0 | 12 6 | 10 0 | 0 0 |
| Carbonate: | | | | |
| Soda Ash..... powder. | 0 2½ | 0 2½ | 0 1½ | 0 2 |
| Soda Crystals p. lb. | 102 6 | 0 0 | 92 6 | 80 0 |
| Hypo-sulphate, per cwt | 15 0 | 0 0 | 18 0 | 0 0 |

| | 1871. | | 1870. | |
|------------------------------|-------|-------|-------|-------|
| | s. d. | s. d. | s. d. | s. d. |
| Soda: | | | | |
| Nitrate per cwt. | 15 9 | 16 0 | 16 6 | 17 6 |
| SUGAR OF LEAD, White, cwt. | 39 0 | 40 0 | 39 0 | 40 0 |
| Brown .. " | 20 0 | 28 0 | 26 0 | 28 0 |
| SULPHUR (see Brimstone) | | | | |
| VERDIGRIS per b. | 1 0 | 1 2 | 1 0 | 1 |
| VERMILION, English.. per lb. | 3 4 | 0 0 | 2 7 | 2 |
| China.... " | 3 4 | 0 0 | 3 0 | 3 |

DRUGS.

| | | | | |
|---|-------|-------|-------|-------|
| ALGEE, Hepatic.... per cwt. | 70 0 | 220 0 | 60 0 | 160 0 |
| Socotrine .. " | 120 0 | 280 0 | 100 0 | 220 0 |
| Cape, good.. " | 26 0 | 28 6 | 26 0 | 28 6 |
| Inferior .. " | 19 0 | 24 0 | 17 0 | 25 0 |
| Barbadoes .. " | 70 0 | 200 0 | 80 0 | 220 0 |
| AMBERGRIS, grey..... oz. | 25 0 | 30 0 | 25 0 | 30 |
| BALSAMS— | | | | |
| Canada per lb. | 0 10 | 0 11 | 1 0 | 0 |
| Capiivi .. " | 1 9 | 1 10 | 1 9 | 1 10 |
| Peru .. " | 9 6 | 0 0 | 9 9 | 10 |
| Tolu .. " | 1 10 | 0 0 | 2 3 | 2 |
| BARKS— | | | | |
| Canella alba per cwt. | 15 0 | 25 0 | 20 0 | 34 0 |
| Cascarilla..... " | 20 0 | 37 0 | 22 0 | 34 0 |
| Peru, crown & grey per lb. | 0 10 | 2 5 | 0 10 | 2 4 |
| Calisaya, flat .. " | 3 2 | 3 5 | 3 4 | 3 6 |
| quill .. " | 3 2 | 3 5 | 3 4 | 3 7 |
| Carthagea .. " | 0 10 | 1 10 | 1 0 | 1 9 |
| Pitayo " | 0 10 | 1 6 | 0 10 | 1 6 |
| Red .. " | 2 0 | 7 0 | 1 6 | 5 6 |
| Bucho Leaves .. " | 0 5½ | 0 10 | 0 3 | 0 6 |
| CAMPHOR, China.. per cwt. | 70 0 | 72 6 | 78 0 | 0 0 |
| Japan .. " | 80 0 | 9 0 | 82 6 | 0 0 |
| Refn Eng. per lb. | 1 2½ | 0 0 | 1 3 | 0 0 |
| CANTHARIDES .. " | 4 8 | 4 10 | 3 0 | 0 0 |
| CHAMOMILE FLOWERS p. cwt | 40 0 | 62 6 | 40 0 | 72 6 |
| CASTOREUM per lb. | 3 0 | 30 0 | 4 0 | 32 0 |
| DRAGON'S BLOOD, lp. p. cwt. | 100 0 | 210 0 | 90 0 | 200 0 |
| FRUITS AND SEEDS (see also Seeds and Spices) | | | | |
| Anise, China Star pr cwt. | 115 0 | 0 0 | 110 0 | 115 0 |
| German, &c. .. " | 44 0 | 50 0 | 25 0 | 40 0 |
| Beans, Tonquin .. per lb. | 0 9 | 1 6 | 1 0 | 1 6 |
| Cardamoms, Malabar good .. " | 7 0 | 8 0 | 10 0 | 12 0 |
| inferior .. " | 5 0 | 6 6 | 7 6 | 9 6 |
| Madras .. " | 3 6 | 7 0 | 5 6 | 10 0 |
| Ceylon .. " | 2 8 | 3 11 | 3 0 | 3 7 |
| Cassia Fistula.. per cwt. | 12 0 | 30 0 | 16 0 | 35 0 |
| Castor Seeds .. " | 10 0 | 12 0 | 10 0 | 12 0 |
| Cocculus Indicus .. " | 19 0 | 20 0 | 19 0 | 20 0 |
| Colocynth, apple.. per lb. | 0 3 | 0 6 | 0 4 | 0 8 |
| Croton Seeds .. per cwt. | 70 0 | 75 6 | 60 0 | 72 6 |
| Cubebs .. " | 25 0 | 29 0 | 27 6 | 82 6 |
| Cummiu..... " | 90 0 | 105 0 | 100 0 | 110 0 |
| Dividivi .. " | 12 0 | 14 6 | 12 0 | 14 0 |
| Fenugreek..... " | 17 0 | 25 0 | 13 0 | 15 0 |
| Guinea Grains .. " | 23 0 | 24 0 | 29 0 | 32 0 |
| Juniper Berries .. " | 15 0 | 15 6 | 10 6 | 0 0 |
| Myrobalans " | 10 6 | 16 0 | 8 0 | 16 0 |
| Nux Vomica.... " | 11 0 | 14 0 | 11 0 | 15 0 |
| Tamarinds, East India .. " | 2 0 | 12 0 | 10 0 | 16 0 |
| West India, new .. " | 10 0 | 27 6 | 10 6 | 20 0 |
| Vanilla, large per lb. | 27 0 | 37 6 | 36 0 | 40 0 |
| inferior .. " | 10 0 | 25 0 | 12 0 | 22 0 |
| Wormseed .. per cwt. | 0 6 | 0 0 | 35 0 | 0 0 |
| GINGER, Preserved, in bond (duty 1d. per lb.) per lb. | 0 6 | 0 8 | 0 6 | 0 10 |
| GUMS (see separate list) | | | | |
| HONEY, Chili per cwt. | 40 0 | 60 0 | 45 0 | 52 6 |
| Cuba .. " | 27 0 | 42 0 | 22 0 | 36 0 |
| Jamaica .. " | 36 0 | 53 0 | 31 0 | 0 |
| IPECACUANHA per lb. | 6 0 | 0 0 | 5 0 | 0 0 |
| ISINOLASS, Brazil.. " | 2 4 | 4 2 | 3 0 | 4 6 |
| Tongue sort .. " | 3 2 | 4 7 | 3 2 | 4 10 |
| East India .. " | 1 6 | 3 11 | 1 8 | 3 11 |
| West India .. " | 3 9 | 4 0 | 3 9 | 4 3 |
| Russ. long staple .. " | 5 6 | 8 0 | 5 0 | 8 0 |
| " leaf .. " | 3 0 | 5 6 | 3 0 | 5 0 |
| " Simovia .. " | 2 0 | 3 6 | 1 6 | 2 6 |
| JALAP, good .. " | 1 5 | 3 2 | 2 6 | 3 4 |
| infer. & stems .. " | 0 6 | 1 7 | 0 6 | 2 7 |
| LEMON JUICE ... per degree | 0 1 | 0 1½ | 0 1 | 0 1½ |
| LIQUORICE, Spanish per cwt. | 35 0 | 37 0 | 0 0 | 0 0 |
| Italian .. " | 40 0 | 60 0 | 40 0 | 60 0 |
| MANNA, flaky per lb. | 3 6 | 4 0 | 3 0 | 3 6 |
| small..... " | 2 0 | 2 2 | 1 0 | 0 0 |
| MUSK..... per oz. | 21 0 | 36 0 | 18 0 | 35 0 |
| OILS (see also separate List) | | | | |
| Almond, expressed per lb. | 1 2 | 0 0 | 1 0 | 0 0 |
| Castor, 1st pale " | 0 5½ | 0 5½ | 0 4½ | 0 5 |
| second .. " | 0 4½ | 0 5 | 0 4½ | 0 4½ |
| infer. & dark .. " | 0 4½ | 0 4½ | 0 4 | 0 4½ |
| Bombay (in casks) .. " | 0 0 | 0 0 | 0 4 | 0 4½ |
| Cod Liver .. per gall. | 5 0 | 6 0 | 5 0 | 6 |
| Croton..... per oz. | 0 3½ | 0 4½ | 0 3½ | 0 |
| Essential Oils: | | | | |
| Almond per lb. | 42 0 | 0 0 | 42 0 | 0 0 |
| Anise-seed per lb. | 8 9 | 0 0 | 8 3 | 0 0 |
| Bay per cwt. | 65 0 | 70 0 | 65 0 | 70 0 |
| Bergamot per lb. | 8 0 | 15 0 | 8 0 | 15 0 |
| Cajeput, (in bond) per oz. | 0 2 | 0 3 | 0 2½ | 0 3 |
| Caraway per lb. | 5 6 | 6 3 | 5 6 | 6 3 |
| Cassia " | 4 0 | 4 3 | 4 3 | 0 0 |
| Cinnamon .. per oz. | 1 0 | 3 6 | 1 0 | 4 6 |
| Cinnamon-leaf .. " | 0 2 | 0 6 | 0 2 | 0 6 |

| 1871. | | | | 1870. | | | | 1871. | | | | 1870. | | | |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|--|
| Essential Oils, continued:— | | | | | | | | Oils, continued:— | | | | | | | |
| | s. d. | s. d. | | s. d. | s. d. | s. d. | s. d. | | £ s. | £ s. | £ s. | £ s. | £ s. | £ s. | |
| Citronello.....per oz. | 0 1½ | to | 0 0 | 0 2½ | to | 0 2½ | 0 2½ | COD.....per tun | 35 0 | to | 35 10 | 40 0 | to | 40 0 | |
| fine..... | 0 2½ | .. | 0 0 | 0 2½ | .. | 0 2½ | 0 2½ | WHALE, South Sea, pale | 34 0 | .. | 0 0 | 37 10 | .. | 38 0 | |
| Clove.....per lb. | 2 4 | .. | 0 0 | 2 6 | .. | 0 0 | 0 0 | yellow | 33 0 | .. | 33 10 | 36 0 | .. | 37 0 | |
| Juniper..... | 1 9 | .. | 2 0 | 1 9 | .. | 2 0 | 2 0 | brown | 30 0 | .. | 32 0 | 35 0 | .. | 6 0 | |
| Lavender..... | 3 6 | .. | 6 0 | 3 0 | .. | 4 3 | 4 3 | East India, Fish | 28 0 | .. | 29 0 | 32 0 | .. | 33 0 | |
| Lemon..... | 5 0 | .. | 9 0 | 5 0 | .. | 7 0 | 7 0 | OLIVE, Galipoli | 47 10 | .. | 0 0 | 51 0 | .. | 0 0 | |
| Lemongrass.....per oz. | 0 2½ | .. | 0 2½ | 0 3½ | .. | 0 3½ | 0 3½ | Trieste | 47 0 | .. | 0 0 | 47 0 | .. | 47 10 | |
| Neroli..... | 0 5 | .. | 0 6 | 0 5 | .. | 0 6 | 0 6 | Levant | 45 0 | .. | 0 0 | 50 0 | .. | 0 0 | |
| Nutmeg..... | 0 4 | .. | 0 0½ | 0 4 | .. | 0 7½ | 0 7½ | Mogador | 44 0 | .. | 0 0 | 49 0 | .. | 50 0 | |
| Orange.....per lb. | 5 0 | .. | 7 0 | 5 0 | .. | 7 0 | 7 0 | Spanish | 47 0 | .. | 0 0 | 0 0 | .. | 0 0 | |
| Otto of Roses.....per oz. | 12 0 | .. | 21 0 | 13 0 | .. | 20 0 | 20 0 | Sicily | 46 0 | .. | 0 0 | 50 0 | .. | 0 0 | |
| Patchouli..... | 3 0 | .. | 0 0 | 6 0 | .. | 0 0 | 0 0 | COCOANUT, Cochinn.. per ton | 50 0 | .. | 50 10 | 44 0 | .. | 45 0 | |
| Peppermint: | | | | | | | | Ceylon | 40 0 | .. | 0 0 | 38 0 | .. | 0 0 | |
| American.....per lb. | 15 6 | .. | 17 0 | 14 0 | .. | 14 6 | 14 6 | Sydney | 33 0 | .. | 39 0 | 32 0 | .. | 27 0 | |
| English..... | 33 0 | .. | 34 0 | 32 0 | .. | 42 0 | 42 0 | GROUND NUT AND GINGELLY: | | | | | | | |
| Rosenary..... | 1 9 | .. | 2 0 | 1 9 | .. | 2 0 | 2 0 | Bombay | 0 0 | .. | 0 0 | 0 0 | .. | 0 0 | |
| Sassafras..... | 3 0 | .. | 3 0 | 4 0 | .. | 4 6 | 4 6 | Madras | 43 0 | .. | 44 0 | 45 0 | .. | 0 0 | |
| Spearmint..... | 4 0 | .. | 16 0 | 4 0 | .. | 16 0 | 16 0 | PALM, fine | 37 0 | .. | 27 10 | 10 0 | .. | 0 0 | |
| Thyme..... | 1 10 | .. | 2 0 | 1 10 | .. | 2 0 | 2 0 | LINSEED | 33 0 | .. | 0 0 | 31 15 | .. | 0 0 | |
| Mace, expressed.. per oz. | 0 1½ | .. | 0 3 | 0 1 | .. | 0 2½ | 0 2½ | RAPESEED, English, pale | 44 0 | .. | 0 0 | 44 10 | .. | 45 0 | |
| Opium, Turkey.....per lb. | 22 0 | .. | 24 0 | 33 0 | .. | 35 0 | 35 0 | brown | 42 5 | .. | 42 10 | 43 10 | .. | 43 15 | |
| inferior..... | 14 0 | .. | 21 0 | 23 0 | .. | 32 0 | 32 0 | Foreign pale | 47 0 | .. | 48 0 | 48 0 | .. | 0 0 | |
| QUASSIA (bitter wood) per ton | 60 0 | .. | 70 0 | 100 0 | .. | 150 0 | 150 0 | brown | 43 0 | .. | 0 0 | 45 10 | .. | 0 0 | |
| RHUBARB, China, good and | | | | | | | | COTTONSEED | 28 5 | .. | 33 10 | 29 0 | .. | 35 0 | |
| fine.....per lb. | 2 0 | .. | 6 4 | 4 6 | .. | 8 0 | 8 0 | LARD | 52 0 | .. | 54 0 | 70 0 | .. | 0 0 | |
| Good, mid. to ord. | 0 3 | .. | 1 9 | 0 7 | .. | 4 8 | 4 8 | TALLOW | 36 0 | .. | 0 0 | 35 0 | .. | 0 0 | |
| Dutch trimmed | 0 0 | .. | 0 0 | 9 6 | .. | 10 0 | 10 0 | TURPENTINE, American, cks. | 41 6 | .. | 0 0 | 30 3 | .. | 0 0 | |
| Russian | 0 0 | .. | 0 0 | 0 0 | .. | 0 0 | 0 0 | PETROLEUM, Crude | 0 0 | .. | 0 0 | 0 0 | .. | 0 0 | |
| ROOTS—Calumba.....per cwt. | 25 0 | .. | 42 0 | 27 0 | .. | 42 6 | 42 6 | refined, per gall. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | |
| China | 22 0 | .. | 24 0 | 25 0 | .. | 35 0 | 35 0 | Spirit | 1 5½ | .. | 1 6 | 1 7 | .. | 0 0 | |
| Galangal | 15 0 | .. | 17 0 | 17 0 | .. | 20 0 | 20 0 | SEEDS. | 0 8½ | .. | 0 10 | 1 0 | .. | 0 0 | |
| Gentian | 27 0 | .. | 30 0 | 25 0 | .. | 26 0 | 26 0 | CANARY.....per qr. | 40 0 | .. | 43 0 | 48 0 | .. | 60 0 | |
| Hellebore | 30 0 | .. | 35 0 | 22 0 | .. | 30 0 | 30 0 | CARAWAY, English per cwt. | 0 0 | .. | 0 0 | 40 0 | .. | 45 0 | |
| Orris | 65 0 | .. | 80 0 | 50 0 | .. | 52 0 | 52 0 | German, &c..... | 0 0 | .. | 0 0 | 25 0 | .. | 34 0 | |
| Pellitory | 58 0 | .. | 60 0 | 58 0 | .. | 60 0 | 60 0 | CORIANDER | 0 0 | .. | 0 0 | 0 0 | .. | 0 0 | |
| Pink.....per lb. | 0 9 | .. | 1 3 | 0 7 | .. | 0 10 | 0 10 | HEMP.....per qr. | 44 0 | .. | 48 0 | 44 0 | .. | 48 0 | |
| Rhatany | 0 5 | .. | 0 11 | 0 5 | .. | 0 10 | 0 10 | LINSEED, English per qr. | 0 0 | .. | 0 0 | 0 0 | .. | 0 0 | |
| Seneca | 4 0 | .. | 4 3 | 2 10 | .. | 3 0 | 3 0 | Black Sea & Azof | 0 0 | .. | 0 0 | 61 0 | .. | 61 0 | |
| Snake | 0 11 | .. | 1 0 | 1 0 | .. | 0 0 | 0 0 | Calcutta | 63 0 | .. | 0 0 | 62 6 | .. | 63 0 | |
| SAFFRON, Spanish | 35 0 | .. | 44 0 | 50 0 | .. | 56 0 | 56 0 | Bombay | 64 0 | .. | 0 0 | 64 6 | .. | 0 0 | |
| SALEP.....per cwt. | 210 0 | .. | 240 0 | 110 0 | .. | 0 0 | 0 0 | St. Petersburg | 60 0 | .. | 0 0 | 58 0 | .. | 59 0 | |
| SARSAPARILLA, Lima per lb. | 0 6 | .. | 0 7½ | 0 6 | .. | 0 7½ | 0 7½ | Mustard, brown, per bshl. | 0 0 | .. | 0 0 | 0 0 | .. | 0 0 | |
| Parz | 1 0 | .. | 1 3 | 1 0 | .. | 1 3 | 1 3 | white | 0 0 | .. | 9 6 | 0 0 | .. | 0 0 | |
| Honduras | 1 2 | .. | 1 7 | 1 2 | .. | 1 6½ | 1 6½ | POPPY, East India per qr. | 59 0 | .. | 0 0 | 59 0 | .. | 0 0 | |
| Jamaica | 1 7 | .. | 3 2 | 2 6 | .. | 4 4 | 4 4 | SPICES. | | | | | | | |
| SASSAFRAS.....per cwt. | 0 0 | .. | 0 0 | 0 0 | .. | 0 0 | 0 0 | CASSIA LIGNEA....per cwt. | 108 0 | .. | 121 0 | 105 0 | .. | 122 0 | |
| SCAMMONY, Virgin.....per lb. | 25 0 | .. | 29 0 | 28 0 | .. | 32 0 | 32 0 | Vera | 45 0 | .. | 80 0 | 47 0 | .. | 85 0 | |
| second & ordinary | 10 0 | .. | 23 0 | 10 0 | .. | 23 0 | 23 0 | Buds | 125 0 | .. | 130 0 | 155 0 | .. | 175 0 | |
| SENNA, Bombay | 0 3½ | .. | 0 6 | 0 3½ | .. | 0 6 | 0 6 | CINNAMON, Ceylon, | | | | | | | |
| Tinnively | 0 3½ | .. | 1 6 | 0 3 | .. | 1 4 | 1 4 | 1st quality.....per lb. | 2 5 | .. | 8 8 | 1 9 | .. | 3 8 | |
| Alexandria | 0 3½ | .. | 1 7 | 0 4½ | .. | 1 7 | 1 7 | 2nd do. | 1 9 | .. | 3 4 | 1 4 | .. | 3 6 | |
| SPERMACEI, refined.. | 1 6 | .. | 1 7 | 1 6 | .. | 1 7 | 1 7 | 3rd do. | 1 7 | .. | 3 1 | 1 2 | .. | 3 5 | |
| American | 1 2 | .. | 1 3 | 1 6 | .. | 0 0 | 0 0 | Tellicherry | 2 7 | .. | 8 0 | 2 8 | .. | 8 1 | |
| SQUILL..... | 0 1½ | .. | 0 2 | 0 1½ | .. | 0 2½ | 0 2½ | CLOVES, Penang.... | 1 2 | .. | 1 4½ | 0 11½ | .. | 1 1½ | |
| GUMS. | | | | | | | | Amboyne | 0 4 | .. | 0 5½ | 6 4½ | .. | 0 5½ | |
| AMMONIAC drop.....per cwt. | 80 0 | .. | 155 0 | 105 0 | .. | 120 0 | 120 0 | Zanzibar | 0 2½ | .. | 0 3 | 0 3½ | .. | 0 3½ | |
| lump | 55 0 | .. | 75 0 | 60 0 | .. | 90 0 | 90 0 | GINGER, Jam, fine per cwt. | 90 0 | .. | 180 0 | 100 0 | .. | 200 0 | |
| ANIMI, fine washed | 260 0 | .. | 330 0 | 300 0 | .. | 340 0 | 340 0 | Ord. to good | 39 0 | .. | 87 0 | 35 0 | .. | 80 0 | |
| bold scraped | 200 0 | .. | 250 0 | 220 0 | .. | 290 0 | 290 0 | African | 29 0 | .. | 30 0 | 27 0 | .. | 28 0 | |
| sorts | 120 0 | .. | 210 0 | 100 0 | .. | 200 0 | 200 0 | Bengal | 28 0 | .. | 0 0 | 26 6 | .. | 27 0 | |
| dark | 75 0 | .. | 110 0 | 75 0 | .. | 100 0 | 100 0 | Malabar | 0 0 | .. | 0 0 | 23 6 | .. | 27 0 | |
| ARABIC, E. I., fine | | | | | | | | Cochin | 40 0 | .. | 112 0 | 39 0 | .. | 126 0 | |
| pale picked | 72 0 | .. | 77 0 | 75 0 | .. | 80 0 | 80 0 | PEPPER, Blk, Malabar, per lb. | 0 6½ | .. | 0 6½ | 0 5½ | .. | 0 6 | |
| sorts, gd. to fin | 57 6 | .. | 69 0 | 67 0 | .. | 79 0 | 79 0 | White, Tellicherry | 0 6 | .. | 1 2½ | 0 9 | .. | 1 5 | |
| garblings | 25 0 | .. | 45 0 | 40 0 | .. | 60 0 | 60 0 | Cayenne | 0 9 | .. | 1 6½ | 0 9 | .. | 1 0½ | |
| TURKEY, pick, gd to fin. | 160 0 | .. | 200 0 | 170 0 | .. | 210 0 | 210 0 | MACE, 1st quality.....per lb. | 3 7 | .. | 4 0 | 3 1 | .. | 8 9 | |
| second & inf. | 85 0 | .. | 155 0 | 90 0 | .. | 160 0 | 160 0 | 2nd and inferior | 2 11 | .. | 3 6 | 2 5 | .. | 3 0 | |
| in sorts | 65 0 | .. | 80 0 | 75 0 | .. | 100 0 | 100 0 | NUTMEGS, 78 to 60 to lb. | 2 7 | .. | 3 10 | 2 7 | .. | 4 4 | |
| Gedda | 38 0 | .. | 44 0 | 38 0 | .. | 44 0 | 44 0 | 90 to 80 | 2 4 | .. | 2 6 | 2 2 | .. | 2 0 | |
| BARBARY, white | 0 0 | .. | 0 0 | 75 0 | .. | 82 6 | 82 6 | 132 to 95 | 1 11 | .. | 2 3 | 1 6 | .. | 2 1 | |
| brown | 45 0 | .. | 49 0 | 03 0 | .. | 72 6 | 72 6 | VARIOUS PRODUCTS. | | | | | | | |
| AUSTRALIAN | 22 0 | .. | 41 0 | 20 0 | .. | 42 0 | 42 0 | COCHINEAL— | | | | | | | |
| ASSAFETIDA, com. to gd | 32 0 | .. | 100 0 | 30 0 | .. | 90 0 | 90 0 | Honduras, black.....per lb. | 2 4 | .. | 3 4 | 2 7 | .. | 3 10 | |
| BENJAMIN, 1st qual. | 160 0 | .. | 400 0 | 280 0 | .. | 400 0 | 400 0 | silver | 2 3 | .. | 2 8 | 2 6 | .. | 2 11 | |
| 2nd | 150 0 | .. | 210 0 | 140 0 | .. | 200 0 | 200 0 | pasty | 2 2 | .. | 0 0 | 2 0 | .. | 2 5 | |
| 3rd | 40 0 | .. | 85 0 | 50 0 | .. | 100 0 | 100 0 | Mexican, black | 2 4 | .. | 2 9 | 2 7 | .. | 3 0 | |
| CEPAL, Angola red | 125 0 | ..</ | | | | | | | | | | | | | |

